Introductory Address
ON
MEDICAL EDUCATION AND MEDICAL LANGUAGE.

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GENTLEMEN,—My first duty is to bid you all a hearty welcome, and to express the hope, on behalf of my colleagues and myself, that those who make their first appearance here this evening may find in University College an *alma mater* in the fullest sense, and that those who to-day return to continue or conclude their studies may find the coming session bring them perceptibly nearer, or allow them to reach with ease, the goal towards which they are hastening.

I would congratulate the newcomers on the choice which they have made of a profession. It is a profession, no doubt, which makes very trying demands upon both our industry and patience, and I may safely say that those of you who are really capable of studying will never finish the work which you begin to-day. Nevertheless, if you honestly study, and honestly practise, you will be compensated in various ways for your labour.

Among the advantages which our profession offers I may enumerate the following:—

1. You will be taught in some degree to read the book of Nature, and you will practically learn that science is the pursuit of truth; that truth, at all hazards, and regardless of all consequences, is at once the keynote of science and morality.

2. Our profession is, perhaps, the least monotonous of all. No two cases of disease are exactly alike, and the types of disease afford us a great variety.

3. It is a minor matter, but not unimportant, that a doctor's life, especially in the country, is necessarily spent to a great extent in the open air and in healthful exercise. How great a blessing this is I need not say.

4. In medicine more than in any other profession I believe the best man wins.

5. You will enjoy a position of great independence. Your only necessary master is your own conscience, and although some of you will doubtless place your necks beneath other yokes you will do so with your eyes open and of your own free will. As a profession we enjoy a singular freedom from State control, and there can be no doubt that the advantage of this is immeasurable. Medicine is free to develop and expand in accordance with natural laws, unshackled by artificial bonds. Medicine is controlled by no "First Lord," apt to take a political view of scientific matters, and there is nothing analogous to the Ecclesiastical Courts to tell us upon which side of a patient we should stand when we feel his pulse, and whether Gregory's powder should be wrapped in a blue paper or a red. May this state of things long continue. It will be a bad day for medicine if it ever becomes a battle ground for politicians, or is subjected to the despotic tyranny of a small majority.

6. The great charm of medicine, after all, is the not unfrequent opportunity which it affords of feeling that your services are appreciated, and I trust that many of you will often experience that "content surpassing wealth" which is afforded by a satisfied conscience and gratitude, which has been well merited.

Having alluded to the advantages of medicine as a profession, it is only fair that I should enumerate some of its disadvantages:—

1. It is not an easy road to wealth; and if money-making be the main object of any here present, I can tell them that scientific medicine is a poor trade. Still a competency is to be earned in medicine at least as easily as in other professions.

2. Medicine is no road to influence or power. Numerically we are poorly represented in the Lower House of Legislature, and no member of the medical (or of any scientific) profession has as yet been allowed to take his seat alongside the squires, warriors, lawyers, and clergymen, who form the Upper House of the Legislature and the Privy Council.

3. One of the minor drawbacks to medicine is the fact that there are no "business hours." The medical man is supposed to have no need of regular food, rest, or relaxation, but to be always ready at a moment's notice to obey the calls which suffering, real or fancied, may make upon him.

4. A greater drawback is the fact that a successful man can scarcely hope to enjoy his ease with dignity in the evening of life. The comparative quiet of the woolsack or the judicial bench, and the sweet seclusion of the prebendal stall or the tranquil deanery, have no counterpart in medicine, and I fear it will not sound very encouraging to some of you to hear that a great success will mean that you will have to work harder as you grow older, and that your declining years will be minced, as it were, into pieces of some fifteen minutes each, and administered to others with the regularity of clockwork.

With these few remarks on medicine as a profession, let me now pass on to speak of medicine as a branch of knowledge. It is common enough to hear people speak of "medicine and the allied sciences," but, as a matter of fact, medicine can scarcely be said to have any individuality *as a science*. It may be defined as "the application of various branches of knowledge to the alleviation of human suffering," but without the so-called collateral sciences it could have no existence whatever. It may be compared to one of those figures which we sometimes see in the intricate tracery of a Gothic window, or the elaborate pattern of a rich mosaic. In these traceries and mosaics one may discern forms of great beauty and symmetry, which, although they are perfectly defined, seem to have no true outline of their own; but depend for their shape, regularity, and beauty upon the intersections of adjacent figures. A clearly defined and many pointed star may be the result of the intersections of many equal circles. Remove the circles and the star ceases to exist. Remove one of them or allow the circles to vary in size, and the star will lose much of its symmetry and beauty. So it is with medicine as a science. It has no outline of its own, and its perfection depends upon a due proportion being maintained in the amount of the various so-called natural sciences which enter into its composition.

There are those who hold that the student of medicine has but little need of special training in the natural sciences, but such a position I believe to be untenable, and if I have to say one thing more emphatically than another to the first year's students, it is to advise them not on any account to neglect their purely scientific studies. They are the very foundation of your professional knowledge, and without a solid foundation no firm or worthy superstructure can be raised.

How can a man hope to rightly comprehend that most complicated of all machines, the human body, with its levers, pumps, and elastic canals, unless he be first furnished with the principles of mechanics and hydraulics? Who will say that a proper knowledge of the eye, or of the many optical instruments used in medicine, is attainable without some acquaintance with the laws of light; or that the intricacies of the ear, and the art of auscultation can at all be understood by him who knows nothing of the laws of sound? The laws of heat must be studied in order to appreciate the difficult problems afforded by the animal temperature, its variations in health and disease, and the means of influencing it by therapeutic agents. Without the principles of chemistry we should be intellectually lost in the human laboratory, and unable to employ chemical agencies in the treatment of disease; and electricity is so correlated with the other physical sciences, and of so much service both in diagnosis and treatment, that its separate study has also become essential. Neither can we altogether neglect geology and meteorology, since conditions of soil and atmosphere are now recognised as important factors in the causation and relief of suffering.

It is scarcely necessary to insist on a knowledge of those sciences which are called "biological." *Anatomy* and *Histology*, formerly the mere handmaids of medicine, but now recognised as sciences worthy of independent study, are as necessary to us as is a chart to the navigator; while *Physiology*, which teaches us the use and mode of action of the anatomical and histological elements, is the

most indispensable of all the preliminary studies of the medical practitioner.

Zoology and botany are not so absolutely necessary for us as are the other sciences, but it is evident that they are very necessary as preliminary studies for the biologist, to whom we look for instruction, for without a study of the simple forms and conditions of life a proper understanding of human anatomy and physiology is not attainable, and in so far as they teach us the conditions of existence of the various vegetable and animal parasites which affect the human body, from micrococci upwards, they are necessary for us as *surgeons and physicians*. This list of sciences is truly formidable, but I nevertheless assert that there can be no true study of medicine without a knowledge of the principles of all of them; and, for my own part, I have never had any difficulty, as a teacher of clinical medicine, in discriminating easily, by a perusal of their clinical reports, between those students who have and those who have not had an insight into the principles of pure science.

Scientific principles are to the physician and surgeon what the sextant and compass are to the navigator. Without them he cannot rise above the rank of a lighterman or a ferryman, but must be content to remain a mere "pill-monger," or a chirurgeon of a base mechanic sort. With them he may fearlessly launch his bark upon unknown seas, and may have the good fortune to extend the frontiers of science, or discover, as it were, new continents to give a wider scope to the art which he professes.

Now, the possession of a sextant or compass does not make a navigator, neither does the mere possession of any amount of scientific knowledge make a medical practitioner. It is quite conceivable that a student (if we can imagine such a one), who had accumulated in his head the combined wisdom of all the professors of a faculty of science, might be surpassed, in the work of practical medicine, by one whose purely scientific knowledge was far inferior.

Medicine is an art, and the father of medicine has truly said "the art is long," and mere scientific knowledge, be it remembered, will no more enable you, without special study, to practise medicine, than a knowledge of acoustics will enable you to play upon the flute. And a patient might justly say, as Hamlet did to Rosencrantz and Guildenstern, "'Sblood, do you think that I am easier to be played on than a pipe?"

It is more than 2000 years since the Physician of Cos gave utterance to the aphorism which says "the art is long." At that time medicine was but a green shoot just showing above the soil; now it is a huge tree with enormous trunk and myriads of leaves and branches, and its growth is still observable from day to day. Hippocrates' patients measured only six feet by two, and the external inspection of them with the unaided eye was a matter which could be accomplished in a few moments. At the present day, when, magnified by the higher powers of the microscope, man is practically as high as Mont Blanc, and about a mile in width across the shoulders, we physicians, metaphorically speaking, laboriously crawl over him like pigmies on some huge hill-side. The convulsions to which he is subjected, the geological formation, the flora and fauna which flourish on the surface, or are found in the ravines and dismal subterranean caverns, are all recorded as accurately as may be by bands of workers each told off to his allotted task. The activity of these workers, and their desire to erect landmarks for the guidance of others, are best shown by the fact that about 20,000 original papers issue from the medical press of the world in the course of a year, so that the man who would keep himself abreast of modern medicine would have to read something very like a million of "original" papers in the course of a professional career. If Hippocrates, with something like a sigh of weariness, said two thousand years ago "the art is long," what would he not have said in this year of grace, when his successors met in Congress in this city, and, dividing themselves into fifteen sections, made nearly 400 important communications to each other in the space of one short week!

These facts give some idea of how much there is to learn after the preliminary science has been mastered. They also show how useless it is to inveigh against "specialism" in medicine. Specialism is a law of Nature, inseparable from the growth of knowledge, and perfectly inevitable. One might as well complain that the oak tree has leaves and branches while the acorn has none. All that we have to contend for is this—that every man before settling down to practise some special department of medicine shall be made to take a comprehensive survey of the whole art; that before a man becomes a pilot, and devotes his whole attention to the navigation of one port, he shall first be fully instructed in seamanship and ocean navigation, lest the ships entrusted to his care be wrecked by his incapacity and want of knowledge. As for those who have not the ambition to take a comprehensive survey of the whole field of medicine, but are content merely to traffic in smooth waters and in sight of land, they must be content to rank with ferrymen and lightermen, with barbers and chiropodists.

If these points be kept in view there is no fear that the general practitioners and the physicians and surgeons, in the widest sense—our ocean navigators, for whom there must always exist an urgent need—will ever regard their specialist brethren with anything but friendliness. Their invaluable services will be received with thanks, and in medicine, as at sea, we shall often see the proud three-decker making signals for a pilot off some harbour's mouth. It is to be hoped, however, that our pilot specialists will carefully abstain from exaggerating the dangers of their particular ports, and from their besetting sin of giving new names to well-known headlands, and putting mark-buoys over imaginary shoals.

Not only has medicine grown to this alarming extent, but the sciences collateral with it have increased at at least an equal rate; and we are thus brought face to face with the practical difficulty of accommodating the education of the medical student, which, theoretically, should cover no small part of the whole range of human knowledge, to the limits of a single lifetime.

After learning the customary amount of classics and mathematics which is necessary in order to cultivate the mind and enable him to acquire further knowledge, the medical student at the age, let us say, of eighteen, and with an expectation of life of exactly forty years, enters upon that special training which is to enable him to earn his living. If professors of economics would tell us, in respect of those who have ultimately to support themselves, what proportion of life should be devoted to *learning* before the serious work of *earning* should begin, the ground would be cleared for the consideration of medical education, from a practical point of view, provided, which is not likely, that professors of natural science would consent to be guided by the professors of a sister science, which has lately been relegated to Jupiter or Saturn. The medical student has hitherto devoted from ten to fifteen per cent. of the forty years which he has to live to his special training,—i.e., to the acquisition of a knowledge of mechanics, hydrostatics, optics, acoustics, heat, electricity, magnetism, chemistry, zoology, botany, physiology, anatomy, histology, pathology, materia medica, therapeutics, medicine, surgery, midwifery, ophthalmology, otology, laryngology, dermatology, medical jurisprudence, hygiene, and logic. In the first half of his course the student learns the principles of natural science, and in the second half he learns to apply those principles to the alleviation of human suffering, or, in other words, he learns the medical art. Now, since most of the teachers of these twenty-six subjects adopt, as is but natural, towards medical education, the view of the currier in the fable, who held that for the defence of the beleaguered city there was "nothing like leather," and since many of them are already demanding that students shall be compelled to devote more time to this or that subject, it is evident that medical education is in imminent danger of becoming impracticable in consequence of the inevitable growth and specialisation of its various departments.

Most of the chairs of natural science in this country have been established to meet the wants of medical students. They were originally mainly filled by medical men who had paid some special attention to these sciences, and there was this advantage in such an arrangement—that the special needs of the medical student were made the first, and not a subsidiary, object with the professor. With the growth of science this arrangement has come to an end. Medicine has served as—

> . . . . . "Young Ambition's ladder,
> Whereto the climber upward turns his face;
> But when he once attains the utmost round,
> Looks in the clouds, scorning the base degrees
> By which he did ascend."

The sciences are subservient to medicine no longer, and no man of sense would wish that they should be so; but nevertheless, we must take care that medical education does not become wholly subservient to the voracity of pure science, and that the younger gods of the scientific Olympus

do not make a triumphal progress with the dead body of old Æsculapius trailing in the dust behind their victorious chariots.

There are some who seem to take, I think, the impossible view that a medical student ought to become, in the highest sense of the word, a physicist, chemist, or biologist, as the case may be, and who speak rather scornfully of that "minimum of knowledge" which is his need. Seeing that the attainment of anything like a complete knowledge of either of these branches of science is the work of a lifetime, such views must end in a collapse more or less complete of any efforts to endow the general practitioners of this country (the backbone of our profession) with a scientific grasp of their art. What is really wanted is to teach the medical student to read these various sciences for himself when he needs, as he often will, to consult them; and to show him, as objectively as may be, those great principles which have already found applications in the healing art. Our effort should be to lead him to think; to induce him to try to be wise, and not to cram his head with details, many of which are very far from being facts. Let us remember what Cowper says—

> "Knowledge and wisdom, far from being one,
> Have oftimes no connexion. Knowledge dwells
> In heads replete with thoughts of other men;
> Wisdom in minds attentive to their own.
> Knowledge—a rude, unprofitable mass,
> The mere materials with which wisdom builds,—
> Till smooth'd, and squared, and fitted to its place,
> Does but encumber whom it seems to enrich.
> Knowledge is proud that he has learn'd so much;
> Wisdom is humble that he knows no more."

There is one branch of medical knowledge which most certainly "does but encumber whom it seems to enrich," and which I think we should strive as much as possible to be rid of altogether. It is a branch of knowledge, if indeed it can be spoken of as such, which is entirely of our own creating, which has, in times past, brought much deserved ridicule upon medicine, and which, albeit much of it seems to me to savour more of pedantry and quackery than of wisdom, has, I fear, become with most of us a vicious and incorrigible habit. I allude to *medical language*.

The unwieldy proportions which this cumbersome branch of knowledge has assumed may be judged of by the "Dictionary of Medical and Scientific Terms," which is now in course of publication by that useful body the New Sydenham Society. This dictionary, a work which reflects the greatest credit upon its learned compilers, was commenced more than two years ago. It already consists of 800 closely-printed large octavo pages, and the compilers have as yet only reached the third letter of the alphabet. If the present proportions be maintained, the dictionary will extend to some 8000 pages, and will contain more than 300,000 terms which the already overweighted student will be expected to master, and if the present rate of word-making is maintained by medical and scientific professors, the appendix, which will be necessary when the work is completed at the beginning of the next century, will be bigger, possibly, than the parent book. Why is it that doctors and men of science seem entirely to forget the use of their mother tongue? What excuse have we, who inherit the most expressive language in the world (the language of Shakespeare and Milton, of the translators of the Bible, of Huxley, Herbert Spencer, and Sir Thomas Watson), to offer for this huge collection mostly of pedantic jargon, which never formed a part of the language of communication of any nation which ever lived upon the earth? I fear that we are as deserving of ridicule in this matter now as we were in the days of Molière and Fielding; and as I firmly believe that this fatal love of long words has contributed not a little in the past to check the advance of medical science, I trust I may be excused for dwelling upon the subject for a few minutes.

In making use of language to express our thoughts we ought to be sure: (1) That the words used really express the idea which it is wished to convey; (2) that they are the shortest; and (3) that they are the most familiar words which are available. Words must be as objective as possible—i.e., they should bring the subject with the utmost vividness before the mind's eye; and therefore those words to which the eye and the ear and the mind have been accustomed for the longest time (vernacular terms used from infancy) are the best; and as it is equally obvious that a word of two syllables requires twice the mental attention that is necessary for the comprehension of a word of one syllable, it is clear also that, other things being equal, the shortest words are the best. We need not be, as almost seems the case, under any superstition that scientific facts, if they be facts, differ from common facts, and require other than common words for their expression. Neither need we fear that by the use of short vernacular terms our literary style will be otherwise than improved. Let us rather take comfort from such a masterpiece of English composition as Gray's Elegy, in which the words of more than two syllables, other than present participles, may almost be counted upon the toes and fingers. To compare the feeling produced by reading a stanza of this exquisite poem with that evoked by the perusal of a paragraph of what passes for English in some medical writings, would be like comparing the pleasurable movement of a first-rate carriage on our wooden pavements with the lumbering joltings of a springless waggon over a corduroy road.

If the advantages of expressing ourselves simply are so obvious, why, it will be asked, do we continue to use the polysyllabic gibberish which passes current as the language of science, but which proves, I think, that we have not yet come to a right comprehension of the scientific use of language? The only justification which can be given for it is the desire, which we all must share, that there should be a common language to serve for the interchange of thought between scientific men of all nations; and the fact that these specially coined words are possibly comprehensible to a select clique of some few nations is supposed to compensate for the fact that they are not only perfectly incomprehensible, but absolutely repellent to the millions of all nations. Do not let us suppose that the terms we use are classical; far from it. Hippocrates and Celsus, were they to revisit the earth, would be as little able to understand them as are the classical scholars of the present day. We owe only a very small minority of them to the fathers of medicine. Those great men, be it remembered, wrote their great works in their own vernacular, well knowing that if a man wishes to express himself with clearness and without ambiguity or fear of being misunderstood, he must use the language with which he is most familiar, and which conveys the most definite ideas to his own mind. By using a language "not understanded of the people" for the expressing of scientific facts, we undoubtedly seriously curtail the area from which we draw our scientific recruits; and I take it that one explanation of the scientific fervour which pervades the whole of Germany is to be found in the fact that scientific terms are in that country very largely derived from the German vernacular, and that he who only knows the German language is not necessarily confronted in a German scientific book with words which compel him to close the volume almost as soon as opened with a sigh of helplessness and hopelessness. There may be those who still think that it would be an advantage to science if Latin were still its common language, as it was two centuries ago, but it is hardly conceivable that science would have advanced by leaps and bounds as it has done if its professors had continued to express their ideas in a language which could never become, like their vernacular, really a part of themselves and the active machinery of their thoughts. It must be admitted that our long words have not hitherto been of much use as a means of international communication. The scientific work of the French and Germans is still a sealed book to us, unless we have mastered the French and German languages, and those who listened to the polyglot discussions which lately took place at Burlington House must have been impressed with the fact that, however desirable a common language for science may be, we never were further from its attainment than at present.

Now, the only branches of knowledge which have anything like a common international language are *Mathematics*, *Chemistry*, and *Music*, and in these international communication is only possible as long as professors rigidly adhere to the use of the symbols which have come to represent the elements of their respective sciences, and as soon as they attempt to write or talk about the facts which these symbols represent, all mutual interchange of thought is at an end. In order to have anything like an international language for medicine, the first step must be to definitely settle upon a set of names, or a code of symbols, to represent the elements of anatomy and histology. This we have already got to a certain extent, but there is not yet a perfect international agreement as to the names to be applied to some of our best known anatomical elements. As a sample of this I may allude to the fact that the nerve which we

call *musculo-spiral* is universally called *radial* on the Continent; and that several muscles of the hand and arm have one name on the Continent and another name in this country. I will not weary you by giving other instances, but I would suggest to the promulgators of International Congresses the desirability of appointing a committee to settle once and for all the names by which the anatomical and histological elements of the human body are henceforth to be known. I do not of course mean to suggest that existing names should be altered. Utterly bad as many of them are, we have become accustomed to them by use, and the very antiquity of many of them, and the fact that some are derived from the names of the older anatomists, serve to give an historic interest to dry facts, and to remind us how laboriously and slowly our knowledge has been pieced together by the great men who have preceded us.

Although we are, I think, bound to accept and continue to use existing names, it is, nevertheless, interesting and instructive to compare the Saxon anatomical and physiological terms, so wonderful in their simplicity and striking individuality, which originally came to us by the light of Nature, with those which have since been added by the light of science. We cannot conceive simpler words, or words less liable to misconception, either by the eye or ear, than *head, neck, eye, nose, skin, back, mouth, tooth, leg, arm, gut, touch, pain, ache, taste, smell, sight, sound, sweat*, and many other most expressive monosyllables, some of which we happily still continue to use, while others have long since been cast aside as "vulgar" (whatever that may mean).

Although we still use the simpler words, we seem half ashamed of them, for whenever we get a chance we make use of our hybrid jargon, and give our pure-bred Saxon the cut direct. The chances are that if a medical writer wishes to speak of the *mouth*, he calls it the *oral orifice*. The *nose* becomes the *olfactory organ;* the skin of the back is the *dorsal integument;* touch is *tactile sensibility;* pain is an *algesic phenomenon;* a fit of the *stomach-ache* is a *gastralgic crisis; tears* becomes *lacrymation*, and *sweating* a *diaphoresis*. In compound words this tendency is more marked, and it is strange how completely we have cast aside the pure Saxon *lore* in favour of *logy*, an Anglo-Greek mongrel. The man who talks of *ophthalmology* or *odontology* would certainly not consent to use such expressions as *eye-lore* or *tooth-lore;* and the professor of *anthropology* would certainly tell us that he had nothing to do with *folk-lore*. Now, I believe that even in scientific anatomy each nation would do well to adhere, as far as possible, to its own vernacular monosyllables, for since anything like a common medical language is not to be dreamt of; and since it is necessary to learn French and German in order to understand French and German medical writings, these terms, which are always amongst the simplest and oldest in the language, are never a source of difficulty. The Greek and Latin terms given by the older anatomists, cumbersome and singularly inexpressive as many of them are, must be retained; but if they be retained they must be retained *in their original form*. If these original terms be translated into the vernacular we get a worse confusion than ever. Let me illustrate this by an example. Some 300 years before Christ, Herophilus, a Greek anatomist of the Alexandrian school, described the C-like bend of the gut which is just beyond the stomach. This bend, being about as long as twelve fingers are wide, he called *the dodekadactyl*, and this term was ultimately translated by the Latin writers into *duodenum*, the word which is now in common use. Although the word itself is neither short nor expressive it should be retained, and used in its Latin (the commonest) form. The Germans, however, are not content to receive the old word merely as a symbol, but, looking back to its original form, they have had regard to its original meaning, and have perversely *translated* it into their own vernacular, and thus *the dodekadactyl* of Herophilus has become the *Zwölf-finger-darm*, or twelve-finger-gut, of modern Germany. Now, although an anatomist may know all about the *duodenum*, it does not, I regret to say, necessarily follow that he knows how the name arose, or what is its meaning; and although he might be well enough acquainted with German to translate the three words, Zwölf, Finger, and Darm, he might be sorely puzzled to know what was alluded to. I could give you many other instances in which the Germans have thus disguised landmarks which would otherwise be easily recognisable by all. Our barbarous technicalities are merely symbols, and if literally translated, they are often misleading, as the meaning we attach to them is usually arbitrary and purely conventional. Thus the man who was under the impression that bacillus anthracis (which according to the Latin and Greek dictionaries means the *little rod of the coal*) was a new name for a patent poker was sadly mistaken. When dealing with anatomical elements, anything like variety of expression is not to be thought of. To speak, for example, of the "latissimus dorsi" in one sentence, and of "the broad muscle of the back" in the next, is only likely to puzzle the reader and throw him off the scent. In like manner the way in which the French speak of the "teres major" as the *grand rond*, and of the "serratus magnus" as the *grand dentelé*, is merely misleading.

I believe that the establishment of an absolute international agreement as to the names to be given to the few hundred elements with which we have to deal is a matter really worth striving after, and a fit subject for the consideration of an international committee. Perhaps such a committee might have some power given to it of altering names, for the unwieldiness of some is out of all proportion to their utility, and it would almost seem as if some names were meant to bear an inverse proportion to the size and importance of the thing designated. We must be very far off from even so much community of expression as is enjoyed by chemistry, when one of our most insignificant anatomical elements rejoices in the name of levator labii superioris alæque nasi. Possibly we might be allowed to speak familiarly of this little muscle as the "sneerer," just as men and women whose names occupy many lines in the parish register are habitually known to their familiars as Jack or Gill, as the case may be.

If we had one common name only (instead of an indefinite number, as is now the case) for the elementary factors of our frames and tissues, and if diseases were named solely with reference to their anatomical seat and the process producing them, we should have attained, I believe, as far as it is possible to attain, a code of expressions capable of international use. As international communication is the only conceivable reason for employing other than vernacular words, so is it also a reason for adhering to our vernacular terms outside the restricted province which I have defined. For international communication we must make ourselves familiar with each other's languages. That is certain. And it is manifestly of importance that each nation should try to keep its language pure in order that it may be the more easily learnt. The practice of concubinage with the dead languages merely has the effect of producing a mongrel language (as unproductive as are all other mules), of huge bulk and monstrous form, which has to be learnt as an additional study.

I may here mention incidentally that the universal adoption of the metric system of measurement would do more for the facilitating of international communication than the coining of any number of words.

It seems to be the pitiable ambition of some writers to seize upon a trifling fact and to give it the longest name they can invent with the aid of a lexicon, and if such a practice be not vigorously discouraged, medicine may become again what it once was, "a rhapsody of words." Some, possibly, are under the impression that their dictionary-made expressions may gain for them a reputation for classical learning. They cannot afford, as did John Hunter, to rely for their reputation upon the facts which they discover, and who, when he was twitted with his want of knowledge of Greek and Latin, wrote thus characteristically to a friend—"Jesse Foot accuses me of not understanding the dead languages; but I could teach him that on the dead body which he never knew in any language, dead or living." The defence has lately been put forward for scientific jargon that every trade or profession *must* have its own technical terms. I confess I cannot see the necessity. The tailor, as far as I know, derives no advantage from calling his smoothing-iron a "goose," and seamanship is not advanced because a sailor's "companion" is one thing at sea and another on shore. It seems to me that technical terms ought, as far as possible, to be discouraged, because the coining of new words when they are not wanted, and the giving of strange and conventional meanings to common words, must increase the difficulty of acquiring any art or handicraft. Many technical terms are maintained for selfish and trades-union purposes, and with the object of covering a simple matter with a veil of secrecy. Let medicine take care that she be not suspected of similar unworthy objects.

Many of our long words exercise a most unwholesome

fascination upon the student, and I have known some who appeared to think that a parrot-like use of words was the main object of medicine, and who have talked, for example, of "sclerosis" as if the word itself had some magic power of explaining every symptom of disease, and defined at once the process at work and its situation. I may be wrong in supposing that our English equivalent, "hardening," would be more likely to make the student think, not only of the *hardness*, but also of the "why" and the "where."

Words (which are but the shadows of facts) are, unlike natural shadows, very often not true. It is most unfortunate that such a word as "vivisection" should come to be arbitrarily applied to so mild a process as that of pricking an animal with the point of a lancet, while it is withheld from the very similar process of pricking an animal with the point of a spur. The word is so vivid in itself, and so calculated to raise in the mind all the horrors of the inquisition and the writhings of witnesses under cross-examination, that we cannot be surprised at a cardinal and a judge combining together to utterly suppress every practice which the word is supposed to denote. Sometimes the shadow will remain, although we are unable to find the substance. Such a shadow is the word "homœopathy." If the term "*like-cure*" had been used, just as "*water-cure*" is used for hydropathy, the proper limits of its application would long ago have been determined, and the word would never have been worshipped to the same extent as a fetish by the faithful among the public.

Among unworthy motives which have induced us to have long words must be reckoned the desire to appear more learned than we are, and there was a time, perhaps, when there was very little true knowledge behind the verbiage which was the chief stock-in-trade of the profession. Now, however, times are changed. Pathology, or the study of disease, has become a true science, and we are no longer content merely to translate the symptoms of which the patient complains into Greek or Latin, as the case may be, and call it a diagnosis. We now recognise when a patient comes to us complaining, for example, that he has lost power on one side of his body, that by calling his trouble "hemiplegia" we make no forward step. It is merely telling him in Greek what he had confided to us in English. It is rather a step back, for it throws what has been called "the decent obscurity of a dead language" over a matter which is self-evident. Our duty now is to discover the *cause* of his symptoms; to form a *judgment* or *diagnosis* on the disease process at work, and its exact situation; and to make a *forecast*, or *prognosis*, as to his chances of recovery, and the best means of bringing it about.

There is in human nature a tendency which is expressed by the words "Omne ignotum pro magnifico,"—a tendency to put an undue value upon the unknown. It was this natural tendency which led the hero of Warren's famous novel "£10,000 a Year" to make the fatal experiment of applying to his hair the pomade called "Cyanochaitanthropopolon," and it is the same tendency which leads the public to buy anything, no matter how common or how worthless, to which the vendor has given a name which is utterly incomprehensible to them. By pandering to this tendency I doubt not that medical terms have been in reality an unspeakable, though delusive, comfort to the public; and that the lady who was told by the physician "that there was still in her husband's lung a perceptible amount of '*whispering pectoriloquy*,' although the *ægophony* had happily completely disappeared," derived from the information the same kind of consolation as did the old woman who, listening to a deep and learned sermon by her rector, found solace in "that blessed word Mesopotamia."

The advantage of using plain language is nowhere more manifest than in courts of law, where the life or reputation of a fellow creature may depend upon your making yourselves perfectly understood by the twelve plain men who constitute the jury. If, however, you do not cultivate the habit of using simple terms at all times, you will find that they are not forthcoming when you want them, and if you cannot tell a plain unvarnished tale, you will lay yourselves open to the imputation that you cannot speak plainly, because you do not understand the question. You must always bear in mind that not only the jury but the counsel and judge also are probably completely ignorant of terms which to you have become a second nature. Reporters for the press are also equally ignorant, and unless you are very careful you will probably be mortified by finding that owing to a non-comprehension of your language by these gentlemen, your evidence, when it appears in print, will seem to you and your professional brethren a mass of rubbish.

I trust that what I have said will lead you to think seriously on this important matter of medical language, and I would finally impress upon those who are beginning their studies, how necessary it is to be sure to understand and rate at its true value every technical phrase they come across. To those who are soon to be adding to our sum of knowledge I would say "Be merciful to posterity"; do not coin new words if you can possibly help doing so, and remember the simple lines of good George Herbert—

> "Let forrain nations of their language boast
> What fine variety each tongue affords;
> I like our language, as our men and coast,
> Who cannot dresse it well, want wits not words."

Introductory Address
ON THE
PRESENT MEANS FOR THE CULTIVATION OF MEDICAL SCIENCE IN BIRMINGHAM.

Delivered at the Opening of the Medical Classes at Queen's College, October, 1881.

BY OLIVER PEMBERTON, F.R.C.S. ENG.,
PROFESSOR OF SURGERY IN QUEEN'S COLLEGE, BIRMINGHAM, AND SURGEON TO THE GENERAL HOSPITAL.

I VENTURE to think, gentlemen, that the title I have chosen as a heading to the observations I am about to submit to your consideration cannot fail to be acceptable to all assembled here. All of you must be interested, more or less, in the growth of the healing art, and many of you, for the first time, appear within these walls to share the labours, the hopes, and, I trust, hereafter the rewards of those whose names as students of merit stand engraved in the record of this day's proceedings, and who are already gathering that fruit, at once the ripest and sweetest in all time—the fruit of early industry.

I use the term Medical Science in its widest sense, comprehending within its limits the art of surgery, dealing with injuries, as well as that of medicine, which seeks, by the administration of remedies, to cure or alleviate disease.

A little more than fifty years ago Mr. William Sands Cox, by founding a medical school in Birmingham, of which our College is the lineal descendant, earnestly endeavoured to attract students to this centre of education, and in this effort realised a success more than adequate to connect the remembrance of his work with that of the ablest pioneers of provincial teaching.

Now, what were the materials afforded the student at that time? The number of beds in the General Hospital was 180; these being the only ones adapted for clinical teaching; for, though the Town Infirmary, as it was then called, numbered 134, the cases were of necessity, in the main, unsuited for teaching, and had they been otherwise would, I fear, have lacked a teacher. There were, indeed, something like 120 members of the profession in the town, yet of these there were only eight who were really in a position to offer any clinical instruction whatever. If I add to this particular opportunity for learning that occasional lectures on scientific subjects were given at the Philosophical Institution in Cannon-street, the record is complete. And here is a very curious circumstance to mention; the governors of the General Hospital of that day, by their committee, absolutely refused to admit more than a limited number of pupils to witness the practice in the wards; the physicians being allowed but twelve, and the surgeons a like number; and, more wonderful still, this restriction was maintained until a quarter of a century later—until, truly, it could linger no longer, and finally died out, as other obstructions have died which have tended in any way to interfere with that broad daylight, in the face of which only can the safety of human life and the good repute of science rest assured. This regulation had, however, one most happy result—it absolutely led to the foundation of the Queen's Hospital, which en-

during monument of the best energies of William Sands Cox claims, since 1840, no ordinary share of gratitude from the people of Birmingham, and at this moment enjoys the same repute, the same honour, the same consideration, that has been for a century enjoyed by its friendly rival.

I am afraid that very many students of medicine entertain the idea that if they diligently attend lectures they have within their reach the chief part of their education. Well, I don't wish to undervalue lectures. Lectures, if given by men of learning in the theoretical chairs, and by men of experience in the practical ones, are of incalculable advantage in guiding the proper direction of thought and application; but they are too apt to divert men's minds from the dissecting-room, the hospital, and the dead-house.

The great question of the day is, In what manner can the present system of education be altered so as to bring students once more face to face with medicine as a practical art?—an intimacy, it is only too well known, that has been slowly but surely cooling from the time when the apprenticeship system ended, and hospital dressing was curtailed. Referring to this particular deficiency, the committee of council of the British Medical Association on medical education reported in January of the present year, being the sixth of their series of eight resolutions, "That before a student receives his licence to practise, he should produce a certificate of having studied for six months with a general practitioner, or in a public institution, where he has personal charge of patients at their homes." This is little enough, but it was time to suggest something. In the introductory remarks of the same report, the statement of the late Dr. Parkes, made before the Medical Council in 1864, is as true now as it was then. Dr. Parkes says: "I must say that in every examination we have had in the Indian service and the army during the ten years I have been an examiner, and during that time nearly eight hundred candidates had come before the examining boards, there have presented themselves on every examination a number of men so imperfectly prepared in the practical part of their profession that we could not admit them into the ranks of the service. Every one of these gentlemen brought forward the double qualification." He said, moreover, "That the Medical Corporations are admitting a number of men into the profession who cannot practise their calling with safety to their patients." The committee calculated that, according to the requirements, which are but little altered at this day, in the space of fifteen months the number of systematic lectures, each lasting one hour, was about seven hundred.

Now, it does not at all follow that, because the examining bodies have not thought fit to make this practical learning more imperative than they have done, therefore, I should be silent on the matter. I have seen a good many men go out into the world "legally qualified" during the thirty-four years that, without a break, I have taken a share in training and teaching, and I am bound to admit that the majority who have gone forth have been lamentably ignorant of the practical duties they were about to undertake; in other words, their experience was likely to have no other source than that arising from a public too confiding in the guarantees of mere academic or university records.

I take leave, then, from this, my standpoint of observation, to tell you what I think you should do to amend this state of things, and at the same time conform to regulations that we all of us here must uphold as long as they are required at our hands; and these remarks apply especially to-day to students in their first year. Before or after morning lectures attend in the dissecting room as much as possible; when not there be present in surgical out-patient rooms, and post-mortem examinations, and in the wards; and on the days fixed for operations arrange to witness them from beginning to end, as you never can foretell what surgical proceedings may be going on, nor what important and unforeseen complications may have to be encountered. If you follow this counsel honestly I will undertake to say that not one amongst you need justify the rebuke administered by Dr. Parkes when hereafter he bids farewell to our guidance.

Let me now inform you as to the means that are really within the reach of you all for the cultivation of medical science in Birmingham.

At this moment the clinical boards of the hospitals—the General, the Queen's, and the Children's, afford the opportunity of study over an average number of some 440 beds, constantly occupied. During the year 1880 upwards of 65,000 patients were received for treatment at these institutions, about 6000 being in-patients and 59,000 out-patients. Among these 6000 cases patients with every variety of disease and injury are to be found, 3500 being classified as surgical and 2500 as medical. Surgery, as one would imagine, in a community working as our mechanics work, predominates in point of numbers. The detail is so remarkable and yet so brief, so suggestive of human suffering, and at the same time so overflowing to our minds with admiration at the skill that science offers for its relief, that I cannot refrain from directing your attention to a few particulars. There were well nigh fifty large amputations, nearly forty cases of operation for stone, making, with other proceedings, such as excision of joints, hernia, and the removal of tumours, a total of 223 capital operations; or, adding other operations, from ligature of large arteries downwards, a total of 553 in a single year. What perhaps will strike you as yet more remarkable than all this is the amazing number of fractures of the larger bones, as a result of injury or accident, during a similar period of time. Thus, the thigh bone was broken in 120 instances, the leg in 285, the upper extremity, including in its grim catalogue of pain and enforced idleness, collar-bone, upper and forearm, in every possible variety—a total of 952! To this add 50 cases of compound fracture, in skull and long bones, serious by complication of wound in soft parts as well as broken bone, and you cannot fail to acknowledge how great is the prospect of experience that is open to you in these particulars. It is a mournful subject for reflection, but one we cannot shrink from contemplating and recording—the victories of the physician and surgeon are not realised without cost. The diseases and injuries of these 6000 were not encountered with equal success in all instances, the fact standing that 400 amongst them succumbed to their maladies. Here, however, as elsewhere, in this country 400 such as these do not die in vain. The careful tracing out by post-mortem examination of the results of disease or injury carefully noted during life, clears away many a mystery that obscured diagnosis and prevented treatment. There exists, indeed, in connexion with these institutions every facility for the study of morbid anatomy; and I am fain to confess that I know of no one circumstance connected with the practice of our calling that excites my admiration more than the fact, within my own knowledge, of how seldom is selfishness or sentiment in this district permitted to interfere with the lessons for the benefit of the living that may be learnt from the examination of the dead.

Would that prejudice and ignorance under the guise of benevolent sentiment were equally absent in another direction. I allude to vivisection. Amid all the outcry, and out of the very clamour itself, sounding the names of those who appear in support of unreasoning condemnation, how curious it is to detect the shrill scolding voice of the female enthusiast; you can trace her influence in every movement of the new game. She writes to the press. One of them wrote to the local press here a few weeks ago. The female enthusiast knows little of the world, and less of science. She can't reason, and she won't read—at any rate she won't read the account of those facts that have been brought to light only by vivisection, which, if she did, would make her shiver as she stood up, lest even her ill judgment should hazard the preservation of human life! Good God! to think of the monstrous cruelties practised daily under the name of sport, and of the unrelenting deprivation of so many animals of their sexual life for the convenience of man! Alas! for consistency. The thought would be ludicrous in its very absurdity were not the issues of life and death involved to our fellow men and women in the consideration, that these things go on daily with the wretched brutes at the hands of unskilled and unlicensed operators, and that an Act of Parliament—a valuable evidence of the collective wisdom of a Senate—an Act of Parliament restrains the hands of confessedly the most humane and disinterested race of men, the scientific observers—from what? from carrying out painless experiments on these very brutes for the benefit of present, and possibly untold, generations of human beings. Did anyone ever hear of anæsthetics being administered in the domestic operations to which I have alluded? Has Parliament interfered with this beneficial object in view? But I digress, and I will only add that, if any of these anti-vivisection enthusiasts, and especially the female ones, desire light, allow me to inform them that they will find it clear and lasting, and incapable of being extinguished by noise, in the address on Public Medicine, delivered at the recent meeting of the International Medical Congress, by Mr. John Simon, C.B.[1]

[1] THE LANCET, August 20th, 1881, p. 321.

I have, in alluding to the great theatre for your study (the combined hospitals), not said a word to you regarding institutions in Birmingham which direct their attention to special diseases: such are the Eye Hospital, the Orthopædic, and Ear and Throat, or the youngest, the Skin and Lock—the student may have access to all and any of these by application to their several officers.

But I have more than a word to say to you about one of these that I have not yet mentioned—the Women's Hospital. Now, if anyone were to ask me what I deemed in my medical life that event which had secured the greatest amount of relief to suffering, as well as had made possible operative proceedings previously deemed unjustifiable, my answer would be the introduction of anæsthetics. Well, the surgery of women's diseases has sprung from this absolutely and entirely. The Women's Hospital here is open to students, but under strict regulations by its staff, enforced for the best reasons of sanitary precaution. The character and extent of the operative proceedings, their unequalled success in hospital practice, the novelty and boldness of some of the undertakings, claim a distinction for this institution in the annals of local surgery second to none.

The opportunities for practical study which I have detailed to you leave little to be desired. The realisation of these rests with yourselves. There is, however, a portion of your training to which I would refer, and which, until recently, was not easy of access in Birmingham. It is assumed that all medical students satisfy an examining board as to their proficiency in certain subjects pertaining to general education, such as is evidenced in a sound knowledge of English and arithmetic, of Latin and mathematics; indeed, none can enter their names on the Register of the General Medical Council until this is done. There is a strong feeling entertained by those who have had the best means of judging that whilst, as a matter of absolute necessity, these studies must take place before the commencement of professional ones, there should also be included in the observance the study of physics, of inorganic chemistry, and generally the acquirement of an intimacy with the natural sciences. These latter, indeed, do not press their attention on those contemplating the ordinary qualifications to practise, but are regarded as well-nigh exclusively the means whereby the highest academical degrees in medicine are ultimately attained at the University of London. These constitute the preliminary scientific examination of that body, and in all instances should be passed previously to your entering as medical students, and immediately subsequent to registration by matriculating in arts.

Hitherto the difficulties that beset the attainment of this knowledge of physics dismayed the best energies, and not unfrequently defeated the industry of the Birmingham students. Out of some 1000 students who have been here since the foundation of the university in 1839, not more than fifty have attempted the undertaking, and of these about fourteen only have become graduates, the rest abandoning the endeavour when probably half accomplished. All honour to the few, for apart from other distinctions, five gold medals, gained under difficulties, stand to our credit. For the first time can it be said that these obstacles are no more. The Science College of Sir Josiah Mason fills in the deficiency of medical education in Birmingham. Its scientific classes are complete and in working order. They are to the practical teaching of this college what the Universities of Oxford and Cambridge are to the barrister, ere he reaches his Inns of Court in London. Henceforward no man will be deprived of the fruits of his industry through imperfect training. He may commence the earliest steps of his work here; he can rest in the same place whilst he makes them perfect, and it will be his own fault, and his only, if he cannot attain all that his wishes or ambition may suggest. No language of mine can adequately convey an idea of the value of the Mason's College to this town. It is only a small part of my gratitude that it provides the deficiency I have referred to in your student life, as it has to be passed in special medical training within these walls. To have witnessed the advance of a community like this, its devotion to free government, to the cultivation of the industrial arts, and bit by bit to the development, under immense difficulties, of a love of that which refines and beautifies, is in itself no mean source of satisfaction. But no event in our history can measure in importance with that surrounding the foundation of Mason's College. The seventh of June, 1832, when the royal assent was given to the Reform Bill, secured to Birmingham those political rights so dear to all who live in a free country. May we not say that on the 23rd of February, 1875, when Mason laid the first stone of the building in Edmund-street, the fitting complement to the liberties of Birmingham was yet more secured in the certain assurance of the power of its citizens to attain knowledge? That dream, the fragments of which Cox, half a century ago, faintly gathered, but could not realise, has already come true—"Birmingham has become the seat of a grand scientific and commercial College."[2] Sooner or later the creation of a University of Birmingham must follow on this beginning, within whose ample folds such elements of usefulness as we have here or elsewhere in our midst, I, for one, fervently hope to see encompassed and absorbed for the common benefit and enjoyment of all.

And now, gentlemen, I hope I have made clear to you that you are students of medicine in no common spot, and that your opportunities for acquiring information, for reaching the standard of the day, are comprehensive and complete. I cannot tell you of surroundings that ages of learned and generous leisure have accumulated in schools such as Oxford or Cambridge, nor can I expect you to believe that at any time the character of our public buildings, or of our thoroughfares, can emulate those which dignify and excite admiration in cities such as Edinburgh, Dublin, or Aberdeen. It is my conviction that favourable impressions, refining influences, are exercised on youth by the spectacle of grace and beauty in external objects, and it is beyond my intention to undervalue them. But, let me ask you, "Are not other sights equally capable of exercising the thoughts for culture and growth?" Here, in Birmingham, science and commerce go hand in hand together. As the town has become rich, by the industry and skill of its workshops, its prosperity has been turned to splendid account. Libraries have been founded! Yes, founded amid the din of hammers, in the very centre of a life of steam and smoke. This is so; and one man, and though I choose to mention definitely but one—let me tell you there are plenty to be met with taking the same way and doing the same thing—I say this one man who makes the best hammers and pincers, and generally what are called here "edge tools," that I know, has established a library that stands as the most complete, the most marvellous amplification and record of the genius of Shakespeare that at the present moment is in existence. Truly, there is hardly anything in the shape of books that you cannot find in Birmingham.

It is the same with art, and what is done with glass here, with gold and silver, and iron can compare without loss of reputation with even the masterpieces of ancient skill, when "time" was on the side of the workman.

Amongst libraries, specially important to you is the foundation of the medical institute. Here are now gathered together some seven or eight thousand volumes on subjects of medicine and surgery, and of the sciences interwoven with them. Your access to this library will be without difficulty and without cost. I need hardly tell you that in the history and progress of medicine there exists a grand literature which should not be, altogether, as time goes on an unknown quantity with you. The class books, or daily companions, will be pointed out by the several professors and lecturers, but as to the mode in which the facts contained in them have been built up—to that, permit me for a moment to direct your attention.

The two thousand years and more that have passed in rendering medical science what it is, were not consumed without the occurrence of centuries of darkness and even of degradation. Greece—the land whence came, for the world that cared to learn, all that was calculated to found knowledge and truth—gave us Hippocrates, who four centuries before Christ succeeded in bringing into order and filtering the mythic traditions of his predecessors, leaving us at this day, in his imperishable writings, such a residuum that the very foundation of our medical literature rests, in many instances, unchanged on his labours. Next Galen, who flourished in the very zenith of Rome's greatness, in the second century of the Christian era, and taught anatomy and surgery in the imperial city. Galen, in Rome, in its best day, enjoyed the ability and the power to make a fresh epoch. Thereafter, with the destruction of Rome, the world went back in learning, and it was not until the lapse of many centuries that in France, Ambroise Paré, establishing the ligature in amputation in place of the horrors of the

[2] Address by W. S. Cox, June 18th, 1831.

cautery, made a third epoch, to be completed as time went on, in our own land, in the last and greatest, that of John Hunter. I bring before you these four names, called by a distinguished professor,[3] the "four apostles of surgery," because they more or less aptly serve to indicate the direction of your inquiries in tracing out the writings of those who filled in the spaces left between these periods. Your thoughts will turn to Alexandria, undoubtedly the cradle of anatomy, and where Galen himself learnt. After Galen to the Arabians, thence to the names surrounding the teaching at Bologna, the earliest university. It will repay you to learn something about Vesalius, the father of anatomy, of Fabricius, who did so much for operative surgery, and so onward through the multitude of glorious names fixed indelibly in our literature, and in the nomenclature of anatomical study. A very few cited convince us as to how they worked and what they left us. Fallopius, Eustachius, Glisson, Steno, De Graaf, Nuck, and Winslow. And so to the days of Hunter, and to search amongst the writings of the men who immediately preceded and followed him, Cheselden and Pott, Abernethy and Cooper.

These, then, faintly sketched, are some of the means for cultivating the art of medicine in Birmingham. The road to them is wide and straight. You must, however, tread it yourselves. None of us here can more than direct your footsteps. The burden of responsibility you carry may be light or heavy; light it certainly will be with hope and truth graven on your hearts; and should any fall out by the way, as having lost hope, when help was probably most near, do you, the survivors, bestow on their memory the blessing belonging to a faithful comrade, to one who has shared with you both labour and danger, and do you with hope renewed and truth abiding "fill in the ranks and march on."

THE PROSPECTS OF CASES OF VALVULAR DISEASE OF THE HEART.

BY J. MILNER FOTHERGILL, M.D.,
SENIOR ASSISTANT-PHYSICIAN TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA PARK.

(Concluded from p. 584.)

To illustrate that I hold no isolated or singular views, let me note what that accomplished physician, Professor Austin Flint of New York, said in 1879:—"The author has known repeated instances of wretchedness for years caused by the belief that apoplexy might be expected at any time, and that death might occur at any moment in cases of purely functional disorder of the heart. Even in cases where a liability can be recognised, as in cases of angina pectoris, fatty heart, and certain aortic lesions, the event may not occur for a long period, if the patient do not die of some intercurrent affection." Now, you see even in some of the gravest forms of diseases of the heart, death does not occur so quickly as is anticipated; in less grave cases the termination is often far distant. A number of cases are present in my mind's eye, which cause me to quote another sentence from Flint. "It does not confer credit on the profession for healthy persons to be able to say that in years past they were pronounced incurable, and the time of death specified." Nor does it make one feel altogether comfortable when a patient tells one that into the teens of years ago he was pronounced to have a "fatty heart," and that he might die suddenly at any moment, and to have to tell him that he possesses a feeble heart truly, but that there are no evidences of organic disease present in it. Nor will I say more about the patient's feelings than that the sensation of relief at hearing this is poisoned by the memory of the long years of anxiety, misapprehension, and misery he has lived through from the rashly expressed opinion, based on a false apprehension, a misinterpretation of the case, given by his whilom medical adviser. Every error of this kind carries with it a far-radiating influence of scepticism as to the accuracy of medical information as regards disease of the heart. For the sake of the profession, for the sake of the public who put their trust in us, it is desirable that such mistakes occur as rarely as may be.

[3] Macleod.

Nor do I wish to have it understood that such errors are confined to that section of the profession known as "the general practitioner." The most serious errors have been made, and to a less extent are still being made, by those who are regarded as more specially informed—namely, the consultants. It is not many years since I was consulted by a north-country gentleman of twenty-four, a man of magnificent physique, in the bloom of early manhood, who had been condemned by two of the most eminent of the untitled members of the profession to a life of inactivity, and all his future clouded by their misinterpretation of a cardiac murmur, discovered by his family physician by an accident. The murmur was a pulmonary murmur, disappearing when a full inspiration drove a piece of lung down betwixt the chest wall and the pulmonary artery. Feeling that my opinion, as opposed to two such eminent authorities, ought not to stand alone, I took the patient to Dr. Broadbent, merely saying there was a dispute about the case; but not even telling him that the case was cardiac. It was a pleasure to see the light that broke over the patient's face as the examination progressed. My opinion was corroborated in almost the exact words I had used, and the subsequent history of the case has fully borne out the view we took.

Again, some years ago a lady well known in literary circles consulted me for a mitral affection of some nine years' standing. There was a regurgitant murmur with dyspnœa on exertion, and unquestionable deformity of the mitral valves. She had some time before consulted a well-known physician, lately deceased, whose knowledge no one would for a moment think of calling in question. Himself the subject of the gravest valvular disease, yet one of the hardest-working members of the profession, he forbad her to work at her desk. Deprived of her favourite occupation, her general health suffered very seriously. The case, as I interpreted it, was one of long-past non-progressive valvulitis, leaving behind a certain amount of deformity, which only became really operative on physical exertion. At her desk the defect was not felt. My counsel was to avoid exertion in all forms; but there seemed to me no reason why her literary work should be suspended. She returned to her desk, with the result that there is no falling off in her work, except such as may be fairly expected when the cares and the demands upon her time as a wife and mother are allowed for.

Now, to the more practical part of my paper—namely, how are such errors to be avoided? The first thing to insist upon is this: a murmur is not always produced by deformity in the cardiac valves. Anæmic aortic, and, still more, pulmonary murmurs, are now generally recognised. Dr. George Balfour, in his work on "Diseases of the Heart," has followed Naunyn in describing what he designates as "curable mitral regurgitation;" and certainly all mitral murmurs are not organic in origin. A form of mitral regurgitation was described by the late Dr. Pearson Irvine (whose premature death we all so deeply regret) as the result of the weakening of the walls of the heart due to anæmia. Nor is it a mitral regurgitant murmur alone which is not due to preceding valvulitis; an obstructive murmur is often heard, unaccompanied by any evidence of structural change. One of the loudest mitral obstructive murmurs I ever listened to was heard some half-dozen years ago in the person of a clergyman from Quebec, who for years had several times a day mounted the heights of Abraham without discomfort. He did not consult me about his heart, but the conversation ran on to that topic. The murmur was heard first when he was a boy of fourteen at Eton. Its discovery caused the greatest consternation, and his alarmed parents took him to the late Dr. Latham, who calmed them by saying that his later and more extensive experience had taught him that such murmurs were not always pathognomonic of structural change, and said that he did not regard it as of any significance. That wise physician has left on record his views as to disease of the heart in a work all too small. He first carefully discriminated between grave and comparatively trivial injuries to mitral valve curtains by endocarditis. In "consequences to life and health from the permanent unsoundness of the heart remaining after endocarditis," he held that there were three divisions—(1) Cases in which, besides the permanent endocardial murmur, there is no other symptom referable to the heart; (2) cases in which, besides the murmur, there is occasional palpitation; and (3) cases in which, besides the murmur, there is constant palpitation." Now, it is this last division only which comprises the typical cases of our text-

books, where there is a series of morbid sequelæ gradually descending more or less swiftly. The case of the lady just given belonged to the second series. It is by no means rare to find instances of the first.

In calculating the prospects of cases of mitral murmurs of organic origin it is well to remember that the series 1 and 2 are not uncommonly met with in early life as the result of a bypast inflammation which leaves behind it a certain deformity of the nature of a scar, without the faintest tendency to take on any further change. Mitral disease associated with the gouty heart in elderly persons is usually progressive, and goes on steadily from bad to worse, though at times so slowly that the progress is imperceptible. Such a case is given in the second edition of my work "The Heart and its Diseases, with their Treatment, including the Gouty Heart," p. 334, in an ex-brewery man, aged sixty-nine, who came under my care at the West London Hospital in January, 1877, with extensive dropsy. On the 17th of the next month he was discharged feeling quite well, and with the dropsy entirely gone. Since then he has attended as an out-patient, a hale, hearty old man, who is short of breath only when walking fast, with a faint mitral murmur audible occasionally. The last time he presented himself was in October, 1879. So that after two years and a half the valvular disease had made no noticeable progress, though the case is one where mitral valvulitis is usually steadily, oftentimes swiftly progressive.

To illustrate what I have to say about the progress and the prospects of mitral valvulitis, I will relate the present position of some cases known to me when in practice in Westmoreland. Now, I left there, for a wider sphere of observation—viz., the Senior Resident Medical Officership of the Leeds Public Dispensary, in December, 1869, so that at least eleven years have elapsed, during which time I have had the cases under intermittent observation; last seen in June this year.

CASE 1.—A girl, who, in 1865, had a distinct musical mitral regurgitant murmur. She was then eight years old. During the period she has required the digitalis and iron at intervals. She is a village schoolmistress, in good health generally, quite equal to her duties, but suffering from palpitation and shortness of breath on exertion.

CASE 2.—A man who had a loud marked presystolic mitral murmur, heard first in 1867. He is out of health at times; but it is not quite possible to say that his troubles are due to his heart, or that there is any deformity in the valves. Probably nothing more than a rough auricular surface to the valve curtains. He is an active blacksmith; only troubled when shoeing very heavy horses.

CASE 3.—His sister, an old servant of my own, who had rheumatic fever just after I left the county, has had a mitral murmur, with other indications at times, as œdema of the legs, pallor, and debility. She is married and has had three children, and when in her ordinary health does her house-work herself. A year ago she had considerable œdema and anæmia after labour, but under a course of treatment directed by me she is apparently quite well again.

CASE 4.—A man who has had severe mitral regurgitation for twenty-seven years, with recurrent severe hæmoptysis at times, is still well. He was ill under my father first, and subsequently under my care. He is now sixty-eight years of age, and is fairly active, being engaged in work until a few years ago, when a legacy allowed him to live quietly. His health last year was the best he had had for years, but a sharp illness this winter has resulted in some swelling in the feet and ankles for the first time. Considering the amount of mitral injury he has worn, and is wearing famously.

Another case died after the severe weather of last spring, which gave her bronchitis. She had rheumatic fever in 1843 for the first time, which left her with severe mitral injury. In 1866 I attended her for a second attack. In 1878 she was in fair health, leading an active life as a village shopkeeper, very seldom being troubled with palpitation. Here was a course of thirty-eight years cut short by intercurrent disease.

Such, then, are some of the facts about cases of mitral disease, showing that it would be an error to transfer to all cases the gloomy prognosis of our text-books.

Now, a few words about the diseases of the aortic valves. I have under care at the present time several aortic regurgitant cases which have not perceptibly advanced, though under observation for four or five years. One, indeed, dates back some twenty-five years, during which time a very active life has been led, and the individual has often been at death's door from overwork. (He has died since this paper was written.) Certainly, aortic regurgitation, as a rule, is a disease which proves rapidly fatal; but, nevertheless, there are cases "where acute mischief is followed by quiescence, and a static condition remains for years—until, indeed, the muscular compensation fails." Of aortic obstruction the prognosis is generally better. I can call to mind three cases: (1) where the mischief lasted, to my knowledge, for fourteen years, when the patient died of apoplexy, probably embolic; (2) the case was alive last year, though it is sixteen years since it came under notice for long syncopal attacks (often found with aortic stenosis); and (3) where it has existed to my cognisance eleven years without perceptible advance, yet the gentleman leads an active life.

The above are some of the cases which I have met with in practice, and they are sufficient to inculcate caution in giving a prognosis in many cases of valvular disease of the heart. With care, in many cases, a life of activity is practicable, provided bodily exertion be avoided, or exercised moderately. Finally, remember the prospects are often profoundly affected by the treatment; and I conclude with a quotation from Latham, "The treatment of diseases rightly considered is, in fact, a part of their pathology," to which I will add, The prospects of cases of valvular disease of the heart depend largely on the treatment employed.

A NOTE ON THE

USE OF SALICYLIC SILK AS A DRESSING FOR WOUNDS, WITH CASES.

BY WALTER HENRY BROWN, M.R.C.S.,
HOUSE-SURGEON TO THE LEEDS GENERAL INFIRMARY.

I PUBLISH the following cases to serve as an illustration of the satisfactory manner in which wounds can be dealt with by the combined use of salicylic silk and carbolic gauze. The cases have all occurred in the surgical practice of this hospital during the last twelve months, and I am indebted to the honorary staff for their kind permission to make use of them. The cases in which I have used this form of dressing include major amputations, excisions of joints (knee and hip), amputations of the breast, removal of tumours, ovariotomy and compound fractures, and it is in the latter class of cases that the dressing has proved most useful. The great objection to the gauze dressing in compound fractures has always been to my mind the rapidity with which it becomes useless—i.e., soaked with discharge and consequently no longer a safeguard against putrefaction. In compound fractures in which there was much bleeding it was necessary to change the dressings several times during the first few days, thus depriving the parts of the benefit of rest and keeping them in a state of irritation, not conducive to repair, and, in addition to this, the cost of large dressings is very great; but by substituting salicylic silk for the loose gauze beneath the ordinary pad, I am now able to leave cases for a week before removing the first dressing. This is an advantage the effects of which benefit not only the patient, by saving him or her the discomfort of repeated dressings, but also the surgeon by saving his time, and the hospital by saving material.

Again, in amputations of the breast we now allow as a rule seven days to elapse before disturbing the first dressing, and rarely, save in exceptional cases, have to dress more than three times altogether. In excisions of joints, too, the silk has answered admirably, enabling me to leave cases for an average duration of a week between each dressing. Another argument in favour of the salicylic silk dressing is that there are some patients whose skin will not bear the constant application of the carbolic gauze, and a condition of erythema supervenes, which often defies all forms of emollients, and the dressing has to be discontinued. Again, some subjects absorb carbolic acid and exhibit toxic symptoms very readily; and here, again, is an element of discomfort. The silk dressing is free from both these objections.

The manner in which I employ the silk is as follows. After having carefully rendered the wound aseptic, according to Mr. Lister's directions, I place over the wound a strip of gauze, soaked in five per cent. solution of carbolic acid; then surround the wound with a double handful of salicylic silk; over this I put the gauze and macintosh pad, and bandage in the ordinary way. It is a most important point to have

the silk thoroughly teased out; in my earlier cases I was not successful, owing, I believe, to the fact that I used the silk in masses. One handful of the material, as sent out in parcels, should yield about four times that quantity after being teased. Another point is to bear in mind that salicylic silk has not power to render aseptic an already putrid wound; so long as the discharges are sweet, so long will the silk maintain them aseptic; but if the discharge be putrid no amount of silk dressing will render them sweet.

Cases treated by Salicylic Silk Dressing.

Nature of Case.	No. of dressings.	Highest Temp.	Remarks.
Scirrhus of breast, with enlarged axillary glands.	3	101°	Cured. Healed in ten days.
Ovariotomy.	3	100	Cured. Healed in seven days.
Compound fracture of tibia and fibula.	4	100 first night.	Cured. Bled through dressing first night. Dressed next morning, and once a week afterwards.
Ovariotomy.	3	100	Cured. Dressed first seventh and fourteenth day.
Amputation of thigh.	4	100	Cured. Senile gangrene involving leg up to the knee. Amputation through lower third of thigh by Teale's method. Dressed every seven days.
Resection of old comminuted compound fracture of tibia and fibula.	7	99⅘	Cured. Both bones "refreshed" and fastened together with wire. Posterior drainage opening made, and tubes inserted. Dressed on the second day, and once a week afterwards.
Excision of knee.	4	101	Cured. Dressed. At the end of seven days wound healed, but an old abscess cavity being still open, the dressing was kept on until this was closed.
Excision of knee.	5	102	Cured. Dressed once in seven days.
Scirrhus of breast.	4	99	Cured. Dressed once a week.
Sarcoma of breast.	3	100	Cured. Dressed once a week.
Adenoma of breast.	1	99	Cured. Dressed at the end of the week, and found healed.
Excision of hip.	8	101	Cured. Bad case. Dressed once in four days.
Co. fracture of tibia and fibula.	5	100	Cured. Dressed every seven days.
Co. fracture of tibia and fibula.	6	100	Cured. Bad case; much bleeding. Dressed day after injury, and then once a week.

The advantages claimed for this dressing by its inventor, Mr. McGill, are by no means over-estimated, and I feel sure that those who have given it a fair trial will agree with me in thinking that it is, if not a perfect dressing, at any rate an addition to the means at our disposal for the treatment of wounds, by which we can procure more rapid and better results than heretofore.

HYDROPHOBIA; TREATMENT BY CURARA; DEATH; AUTOPSY.[1]

By CHAS. EGERTON JENNINGS, M.R.C.S. Eng.,
HOUSE-PHYSICIAN AT THE LONDON HOSPITAL.

LYSSA is a disease which must interest the profession in no small degree—first, because when once the stage of invasion has set in it has proved uniformly mortal, for since the days of Aristotle I believe no authentic case of recovery has been recorded; secondly, because the specific virus, the materies morbi, has never been isolated, nor its origin or mode of action made out; thirdly, that though no successful treatment is known, it may be hoped that with the increasing advantages for pathological and therapeutical research it will soon be discovered; fourthly, that the agony and sufferings of the patient may be greatly palliated; and lastly, that prophylactic measures, if sedulously adopted, are attended with the best results. On these grounds, then, I venture to bring forward the following case.

Thos. T——, aged thirty-seven, for the last five years had been a vagrant. He had once been "laid up badly with spitting of blood and cough." Latterly he had enjoyed excellent health; his family, too, have always been remarkably healthy. On July 24th, 1881, the patient was brought to the London Hospital. On being called to the receiving-room, I found him sitting on the sofa, his elbows resting on his knees, his hands supporting his head. When spoken to he quickly looked up, his face presenting a pale, dull, sallen aspect; the beard and hair disarranged. He seemed much careworn, answering questions put to him abruptly, and looking around him in a frightened, startled manner. The eyes oscillated rapidly; the pupils were dilated. A horn of water being produced, he uttered a terrible shriek, terminating in a moan, flung his arms up wildly, sprang from the couch, and dashed past the bystanders into the adjoining room. He was immediately admitted, and conveyed to a private ward. Examined in bed he was found to be perfectly intelligent, and I readily elicited the following history from him:—On June 4th he was working as a navvy on the line, when a dog jumped out of the hedge and bit his left hand. (The dog bit two boys and some other dogs besides, and was shot the same day.) The wound healed very readily, and gave no trouble. The stage of incubation was therefore about six weeks. During the past two or three days he experienced headache, slight diarrhœa, and other symptoms of general malaise; the prodromata were vague; he soon complained of pain in the hand at the seat of the wound, with swelling and tenderness on pressure; in this way the stage of recrudescence began. Next followed aching and tingling sensations passing up the forearm, a feeling of constriction around the throat with "choking" sensations, and pain and "tightness" in the upper part of the chest. He was hungry and thirsty, but concurrently with the advent of these symptoms deglutition became impracticable owing to the spasms induced by the attempts thereat. There was vomiting. Diarrhœa was well marked, but not excessive. Up to this point his story was clearly and calmly given, though with dread and some reluctance when speaking about the causation of his malady. He exhibited no emotion whilst describing his thirst, but when the thought of liquids or the idea of swallowing suggested itself to him he instantly broke out into a paroxysm similar to, though not so severe as, the one witnessed in the receiving room. The pupils were more dilated than heretofore. The pulse was full and bounding. The heart's apex beat could be seen and felt in its normal site; auscultation was not attempted. The skin was hot; the tongue moist, and slightly coated on the centre of the dorsum; nothing peculiar was noted on its under aspect. The melancholic stage seemed to be merging into the stage of excitement. There had been no satyriasis nor any sexual symptoms. The dog had apparently seized the radial side of the metacarpus of the left hand in its mouth. There was a mark between the heads of the metacarpal bones of the index and middle fingers; a corresponding mark on the palmar surface; two or three others were grouped together, but not so well defined, on the thenar eminence. All these presented common characteristics. Each was papular and livid, being elevated to the size of about half a pea, with a zone of congestion around. The parts were very hyperæsthetic; there, too, was general hyperæsthesia; aërophobia was well marked. He bitterly complained of the amount of light in the room, and the window was therefore closely screened. One-tenth of a grain of curara was administered hypodermically at 6 P.M. (about an hour after admission). It had the effect of diminishing spasm very rapidly, and was directed to be repeated every twenty minutes or half hour, according to circumstances. Three or four injections were given at the stated intervals with marked benefit; then a quarter of a grain of morphia was substituted, unknown to the patient, for a curara injection, shortly after which he had a paroxysm with dyspnœa, terminating in vomiting; a second injection of morphia failed to ameliorate the symptoms, but made them worse. The man declared he would submit to no

[1] Published by the kind permission of Dr. Langdon Down.

more injections, and went to stool. A semi-fluid motion was passed, with a very offensive odour. Calvert's disinfectant carbolic powder was ordered to be used. The nurse, by mistake, brought into the room a stone jar of solution of carbolic acid. The splashing of the fluid in the jar excited a more severe paroxysm than any hitherto seen, the respiratory efforts being most intense, the extraordinary as well as the ordinary muscles of inspiration being called into play. With persuasion he assented to the renewal of injections. Curara was now employed, the dose being doubled. Some relief was obtained, but he complained of the most agonising thirst. Ice was was proposed to him as a remedy. "Ice? Ice? Do you want to drive me mad? I've been drowned already."—"Would you like a fire?" "A fire? No, no," and he uttered a piteous moan. He said he much liked the curara injections, and would hold out his leg for them. On entering the ward, about 10 P.M., I found him pacing to and fro in great distress; he wanted to micturate. A very small utensil was handed him; he sat on the edge of the bed and passed about three ounces of urine. This he did with difficulty, but was not attacked with a paroxysm, as was anticipated; no trickling or splashing sound being audible, the idea of fluid probably did not occur to him. He suddenly called for ice. Some ice, broken up finely, wrapped in a thin towel, was given him. Instead of sucking this through the towel, as told to do, with trembling hand he unfolded the towel and put a fragment of ice into his mouth, rapidly rejecting it, a spasmodic attack resulting. This passing off, he again tried the ice, and with more success, putting it into his mouth and rejecting it without attempting deglutition. Foaming at the mouth next supervened, quickly becoming excessive, and associated with renewed paroxysms. To ensure safety he was removed to a padded room. On being led to it he complained of a gust of wind. This was the second time aërophobia manifested itself. He could not by any means be induced to fancy his new situation. He declared the room was only fit for a madman, and could not be persuaded he might injure himself if left in the ward. The surroundings irritated him considerably. A dip candle enclosed in metal netting was introduced into the room as a means of affording some illumination. He instantly exhibited the utmost consternation, and an attack of dyspnœa ensued. The padded panels of the chamber he described as so many coffins, and conjured up hallucinations which the lurid glare of the place certainly justified. He was soon conveyed back to his former bed, and expressed the greatest satisfaction at the exchange. If left alone he thought he could sleep; this he did not succeed in doing, but obtained relief from the curara. About 3 A.M. he had a most severe attack, and vomited excessively. He had called for water to relieve his thirst, a small quantity being supplied him in a mug; this he tried to swallow at a gulp, instantly dashing the vessel down on the bed. After intervals he repeated the experiment twice. He was much exhausted, but said his thirst had been momentarily assuaged. Being much worse two hours later, as a matter of absolute necessity he was again removed to the padded room. This time he did not recognise the change. His condition rapidly deteriorated; at 10 A.M. he was foaming profusely, and spitting about. He had passed water on the floor, having dashed to pieces a utensil proffered him, and, dipping the counterpane into the fluid, applied it to his parched lips. He now called for a sponge, which was given him just damp; he pressed it to his mouth, immediately asking for a wetter one. A very wet sponge was given him, which he bit; deglutition was attempted and evoked a paroxysm with coffee-ground vomiting. He was so much worse, and the attacks so frequent and violent, that anæsthetics were resorted to; chloroform was administered, but the pulse becoming feeble, ether was substituted. After some time it was determined to give a nutrient enema; a mixture of strong beef-tea, eggs, a little milk, and two drachms of brandy was injected into the rectum. Very shortly the respirations and pulse suddenly failed; artificial respiration was at once commenced, brandy was injected subcutaneously in the præcordial region, galvanism was tried; but all these means were ineffectual in restoring life.

Autopsy, twenty-seven hours after death.—Cadaveric rigidity strongly marked, save in the muscles about the lower jaw. Extensive post-mortem hypostasis. The blood was semi-fluid, of a dark, tarry character. The voluntary muscles were purple-red in colour. Extreme congestion of the fauces and pharynx and extravasations of blood into the sub-pharyngeal connective tissue. No changes observed on the under-surface of the tongue. The stomach was empty, its mucous membrane of a chocolate or coffee colour. Hæmorrhages in the mesentery. No structural changes in the liver, spleen, or kidneys; but these organs were intensely congested. Heart: in colour like the voluntary muscles; the left side firmly contracted; no evidence of disease. There were old pleuritic adhesions. The lungs were greatly congested. Brain: Minute punctiform extravasations beneath the pia mater—not extending into the grey matter beneath—over the posterior parts of the temporo-sphenoidal convolutions, and the third and fourth annectant gyri, especially on the right side. Similar extravasations over the superior parietal lobules and adjoining parts of the marginal convolutions, also around the vagal nuclei. Marks of the bite on the left hand, which ante mortem were "papular and livid," post mortem were no longer so; their site was indicated, after sponging the part, by slight scratches only. No macroscopic changes were observed in the axillary glands, or brachial plexus, or in the nerves or vessels immediately above the seat of the primary lesion. Portions of these structures, as well as of the brain and spinal cord, have been preserved for microscopical examination.

Remarks.—I cannot conclude without drawing attention to standard works on, and records of authentic cases of, lyssa, with reference to three points:—1, the use of curara as a palliative agent when the disease has undoubtedly manifested itself; 2, the modes by which inoculation may be effected and the malady promulgated; 3, prophylactic treatment.

1. *Curara.*—Five injections of curara, each of a third of a grain, were administered to a patient, *in extremis*, between the hours of 6.30 and 9 P.M., he dying at 9.50 P.M., with the result that at first there was noticed "less power in the limbs," and later he became "much quieter, but could move his limbs a little."[2]

Again, "It should be observed, however, that a case of recovery is said to have occurred in 1874, in the practice of Dr. Offenburg of Winkrath, under the use of injections of curara, of which about a third of a grain was administered every fifteen minutes or so. The patient was well on the eighth day."[3] "In hydrophobia it also exerts a good effect by relieving the violence of the convulsions, and reducing their frequency. In these cases it has been thought to have cured patients afflicted with rabies canina."[4] "The favourable results said to have been attained in some cases of tetanus by the use of curare decided me to try it in a case of lyssa under my care. At first one-tenth, later one-fifth, of a grain of carefully-tested curare was subcutaneously injected at intervals of three to four hours. Distrustful as we were about the result this treatment seemed of palliative benefit, and seemed to afford greater relief than the morphine injections. The patient repeatedly prayed for the continuance of curare injections, as he was firmly persuaded that they relieved him. This experience is enough to make me urge injections of curare in any case of lyssa humana, and, as nothing can be lost by it, to give it even more boldly than we did."[5]

2. *Etiology.*—That lyssa is ordinarily contracted by the bite of a rabid animal, notably the dog, on some uncovered part of the body is an established fact; but it is important to know definitively whether inoculation can be effected by implantation of the virus on a sound mucous membrane or unabraded skin. There seems evidence to show that inoculation may be thus effected,[6] though, on the other hand, it must be admitted that such modes of inoculation are exceptional.[7]

There are reasons for supposing that the virus is probably communicable from man to man, as well as being retro-inoculable from men to animals;[8] that it may be transmitted not only by means of the saliva, but also by preparations of the salivary glands.[9] It is important to note also that the disease may be contracted at necropsies.[10] The effect of clothing in preventing inoculation is very great. Dr. Down drew attention to this fact in reference to his case already quoted, where the brother of the patient

[2] Langdon Down on Hydrophobia, THE LANCET, May 18th, 1880.
[3] Bristowe, Theory and Practice of Medicine (2nd Edition), p. 247.
[4] Farquharson, A Guide to Therapeutics (2nd Edition), p. 309.
[5] Niemeyer, Text-book of Practical Medicine, vol. ii., p. 740.
[6] Watson, Principles and Practice of Physic (5th Edition), vol. i., pp. 599, 604. [7] Idem. [8] Idem, p. 607.
[9] Ziemssen, Cyclopædia of the Practice of Medicine, vol. iii., p. 441.
[10] Idem, p. 475.

affected and another were each bitten by the same dog through the clothing and escaped scot-free.

3. *Prophylaxis.*—So great is the immunity conferred by clothing that the use of gloves for those attending hydrophobic patients should be insisted on. Recent wounds may be treated by cupping; suction by the mouth is clearly objectionable for reasons already stated. Excision of the wound may be practised; in some cases amputation might be resorted to, if, for instance, a finger were the part involved. Of caustics, though the acid nitrate of mercury, nitric acid, caustic potash, and other escharotics are advocated, yet there seems ample reason for recommending nitrate of silver.[11]

With regard to surgical treatment of the wound during the period of recrudescence the question arises, Has the virus remained dormant during the incubative stage, and been localised at the seat of the injury? Or has it infected the system *ab initio?* I believe those who hold the latter view are few in number—certainly Marochetti was one; and his doctrines have received the support of Trousseau. The followers of Marochetti will therefore carefully examine their patients for lyssi during the first three weeks of the period of delitescence; if found, they can be treated as prescribed by their discoverer. But if they be not found; if the disease progress; if the character of the wound and the prodromic symptoms leave no doubt as to the malady being fairly established, what treatment can be adopted? Though unusual for the lymphatic system to be manifestly infected, nevertheless this is proved to have occurred.[12]

On the supposition that the disease is entirely of a neurosal character, resection of centripetal nerves leading from the wound has been recommended, tried, and failed. The question of amputation must certainly be considered. A tourniquet has been applied to the bitten limb of a hydrophobic patient, and the "symptoms quickly improved, and even seemed to cease altogether." The symptoms returned on the removal of the tourniquet, but disappeared on its reapplication.[13]

The actual cautery might nearly always be applied to the wound, and, if tried sufficiently early, with some hope of success. Whilst advocating this as a reasonable mode of procedure, we must lament that our therapeutic knowledge on this subject is scarcely a whit more advanced than it was in the time of Celsus.

A CASE OF TRANSFUSION OF BLOOD.

By ARTHUR EDDOWES, M.R.C.S.,
AND
J. B. PIKE, M.R.C.S.

AT 4.30 A.M. on the 29th of July last, I saw Mrs. W——, and found that she had expelled a fœtus of about three months' growth the night before at seven o'clock, and had been flooding ever since. With some difficulty I extracted the membranes, having previously given a full dose of ergot and brandy. Hæmorrhage still continuing slightly, I introduced my finger several times into the uterus, having dipped it in a solution of perchloride of iron. The hæmorrhage stopped, but the patient seemed to be sinking in spite of the free use of brandy.

I then sent for Mr. Eddowes, asking him to bring his transfusion apparatus (Aveling's). Mr. Eddowes arrived about half-past five, and after a little time we decided that transfusion offered the only chance of saving the patient. She was pulseless at the wrist, or with only the faintest flicker, and breathing with difficulty. Mr. Eddowes exposed the median cephalic of the patient, and inserted the cannula. I then opened the median basilic of the husband, and we inserted the second cannula with rather more difficulty. The syringe, full of warm water, was then attached, and between two and three ounces of blood injected. There was immediately a slight, but still marked, improvement in the state of the patient, the pulse reappearing perceptibly at the wrist, and the breathing being less laboured.

She remained in a very precarious state until between three and four o'clock in the afternoon, when reaction set in, and continued for a few days. The temperature did not, however, rise above 100°. The patient was most carefully nursed during the critical day by Mr. Eddowes, myself, and the district nurse, stimulants and beef-tea being given at short intervals, and warmth applied to the body. No doubt to this fact, combined with the stimulus of the fresh blood, she owes a recovery which has been rapid and satisfactory.

Loughborough.

[11] Watson, op. cit., p. 622. [12] Idem, p. 609.
[13] Trousseau, Clinical Medicine, vol. i., p. 712.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GREAT NORTHERN HOSPITAL.

RECURRENT FIBROID MAMMARY TUMOUR.

(Under the care of Mr. GAY.)

AN interesting case of this kind recently came before Mr. Gay. He had removed the mammary gland a twelvemonth previously. There was no axillary complication, and the wound healed well in about three to four weeks. The patient was a lean person, aged fifty-four years. When she presented herself again, two painful growths had recurred on the axillary side of the site of the former operation, and had ulcerated on their surfaces. The bases were of almost a scirrhous hardness, but unadherent to the subjacent structures. The ulcerated surfaces were flattened, and had the appearance of being made up of eversion, from central gaps of the skin and, might be, allied structures.

Mr. Gay said he deemed the case one of considerable interest, as illustrating a by no means uncommon instance of fibro-recurrent or recurrent adenoid growth, such as he had described repeatedly in the Pathological Transactions, and which has a history, both clinical and pathological, of its own. Mr. Gay had no difficulty in distinguishing the case from absolute cancer, although it appears to stand close on the immediate confines of that disease. Originally a growth from the mammary fibrous structures, its recurrence is never prevented by the ablation of the gland. It is but slightly infective, so that the axillary glands do not show any marked disposition to enlargement, either by contamination or sympathy; and in the event of their becoming enlarged, the swellings usually either subside, or ulcerate after the fashion of the parent growths. It is at certain stages spindle-cell shaped in its histological characteristics. The tendency of these tumours to grow, as well as to ulcerative degeneration, is in the direction of the skin. They admit of removal in any stage of their career, and certainly with much temporary advantage to the patient, as the disease seems to have a specifically local character, and does not usually invade vital organs. On the other hand, with removal, the patient is very prone to improve in constitution, and to get healthy and fat. Such cases must have come under the observation of other surgeons; but, as far as Mr. Gay was informed, have not met with much attention.

RECURRENT CANCEROUS (?) DISEASE IN SCROTUM AND CORD AFTER ABLATION OF A SCIRRHOUS TESTIS, WITH SKIN ULCERATIONS, EXPOSING "TUMEURS GOMMEUSES" IN FRONT OF THE STERNUM.

The patient, a pale weakly-looking man, aged forty-three, submitted to the removal of the right testis three years ago for supposed cancer. The parts healed, and he went to his usual employment. Ten or twelve months since the cicatricial line of the scrotum became the seat of slow but superficial ulceration—i.e., an ulcer penetrated the skin, the edges of which in some parts became somewhat indurated, whilst in others they thinned and somewhat overlapped the sore, or, rather, the sore undermined the skin edge. At the same time the end of the cord thickened, and became painful on handling. There was no glandular complication. As this disease broke out in the scrotum, a swelling took place over the upper part of the sternum. The skin over it ulcerated so as to enclose a growth of pinky and redundant granulations below, which

had their attachment by a broad basis to the subjacent textures. It suppurated freely, the pus being thin but of a healthly colour. The patient denied his having ever had a venereal complaint of any kind; and there were certainly no symptoms, or account of symptoms, which threw doubt on his statement. The case was seen by Mr. Macready and Mr. Gay, who agreed that it presented an instance in which two different forms of ulcerative disease co-existed, and devoloped almost *pari passu*. The case is likely to remain under observation; and, if so, the issues shall be reported. The treatment ordered was nutritive and tonic in its tendencies, with slight alteratives: iron, quinine, cod-liver oil, and good food, with Plummer's pill at night.

MANCHESTER ROYAL INFIRMARY.

CASES OF NERVE-STRETCHING.

(Under the care of Mr. F. A. SOUTHAM.)

CASE 1. *Idiopathic lateral sclerosis; stretching of the left sciatic nerve; relief.*—John H——, aged thirty-six years, was admitted, July, 1880, under the care of Dr. Morgan, suffering from well-marked symptoms of lateral sclerosis. The patient presented the characteristic spastic gait; the patellar reflex and ankle clonus were much exaggerated. The muscles of the thighs (more especially the adductors), and also those of the legs, were rigid and contracted, and their reflex activity was readily excited. There was no atrophy, nor loss of sensation, but he complained of severe pains in the abdomen and both lower extremities, which were especially worse at night, and could not be relieved by morphia or other means.

At Dr. Morgan's suggestion, and with the object of affording relief from the shooting pains in the limbs, the left sciatic nerve was exposed and stretched by Mr. Southam, on July 13th, 1881, just below the spot at which it emerges from beneath the lower border of the gluteus maximus, sufficient force being employed to raise the limb from the horizontal position, and traction being also made in both an upward and downward direction, so as to bodily move the patient upon the operating table.

Immediately after stretching the nerve, the patellar-reflex and ankle-clonus completely disappeared in the limb operated upon. The operation was not followed by any apparent loss of sensibility, but the spastic contraction of the muscles of the left thign and leg was somewhat diminished, as proved by the fact that flexion and extension of the limb were considerably freer than before its performance. On the second day after the operation, the shooting pains in the abdomen and both lower limbs suddenly ceased; and the same evening he passed the first night free from pain for twelve months. In the course of a fortnight, ankle clonus and patellar reflex began gradually to reappear, and soon reasserted themselves with almost all their former intensity. Six weeks later, there had been no return of the attacks of pain; the movements of the left limb were still much freer than those of the opposite side, and the patient expressed great satisfaction at the relief the operation afforded him.

CASE 2. *Locomotor ataxy; stretching of the left sciatic nerve; relief.*—Elijah W——, aged fifty-one years, was admitted on July 8th, under the care of Dr. Dreschfeld, suffering from well-marked symptoms of locomotor ataxy, which had first appeared about three years previously. The patient showed the typical ataxic walk; there was no loss of power nor atrophy of the limbs; the patellar tendon reflex was entirely absent. He complained of severe shooting pains in the abdomen and down the lower extremities, also of girdle pains at the level of the umbilicus. There were no gastric crises nor bladder symptoms; the eyesight was somewhat impaired, and the Argyll-Robertson phenomenon was well marked. On July 18th, at Dr. Dreschfeld's suggestion, the left sciatic nerve was exposed and stretched by Mr. Southam, as in the preceding case. The operation was not at first attended by any apparent result; no loss of sensation, nor of muscular power, was produced, nor was it for a time followed by any relief from pain. After about ten days, however, the shooting pains in both legs began gradually to disappear, and he left the hospital on August 15th greatly relieved in this respect, but with the other symptoms—viz., ataxic walk, girdle pains, shooting pains in the abdomen, in no way affected by the operation.

CASE 3. *Clonic spasm of the muscles of the face; stretching of the facial nerve; relief.*—Ellen M——, aged thirty-two years, was admitted on July 30th, under Mr. Southam, suffering from clonic spasm of the muscles of the right side of the face. The spasm had first appeared about four years previously, but had increased very greatly in severity during the last few months; it was not constantly present, but came on at irregular intervals of short duration, causing the patient considerable distress. On August 1st the right facial nerve was exposed behind the ear, just at its emergence from the stylo-mastoid foramen, and then forcibly stretched on a blunt hook, which was passed beneath its trunk. This treatment was followed by the usual symptoms of complete paralysis of the muscles of the right side of the face; but under the influence of a weak interrupted current, which was first applied a fortnight after the operation, they began rapidly to disappear, and four weeks later were only present to a slight extent, there being at the same time no appearance of any return of the spasm.

DONCASTER INFIRMARY.

A CASE OF RUPTURE OF THE INTESTINES.

(Under the care of Mr. WILLIAM WALKER.)

A YOUNG man, aged nineteen years, was admitted, about four o'clock in the afternoon, in an insensible condition. It was said that he had been drinking, and, whilst driving home, had fallen off the shafts of his cart, in his sleep, and the wheel had passed over his body. There were no signs of collapse, the pupils being equal and active, and the skin warm. Stertorous breathing was absent. The insensibility was evidently due to the profound sleep of alcoholism. Having been put to bed he vomited a few ounces of clear fluid, smelling of beer. On examining the body no injury could be found save a slight bruise in the left iliac region of the abdomen. He slept during the greater part of the night, and the next morning was perfectly conscious, and expressed himself as feeling quite well. Another careful examination of the body failed to detect any grave lesion. There was no trace of blood either in the fæces or urine, and there was no abdominal tenderness. Although importunate to be allowed to get up, he was only permitted to walk to the general ward, a distance of a few yards. He was placed on a diet of milk and broth, with a little bread. At the afternoon visit he presented the same satisfactory condition, and this continued until six o'clock in the evening, about half an hour after taking some milk and bread. He was suddenly seized with cramping pains all over the abdomen, with tenderness and other signs of severe peritonitis. Hot poultices were applied, and opiates and stimulants were freely administered, but without avail, for he quickly fell into a relapse, with quick small pulse and cold clammy skin, and died at 7.30 P.M., twenty-seven hours and a half after admission.

Necropsy.—The bruise, observed during life, was a little more prominent, but no other external injury was visible. On opening the abdomen the peritoneum covering the intestines was seen to be very injected, and there were a few ounces of clear serum in the cavity. On following the intestines up a complete severance was found in the jejunum, situated over the vertebral column. The rupture formed a regular circle, with the edges inverted and frayed, as if the separation had been produced by a blunt pair of scissors. The ends of the intestine were in good apposition. There was no ulceration on their internal aspect. The stomach contained a little liquid, partially digested food, and similar ingesta exuded from the upper end of the divided gut.

Remarks by Mr. WALKER.—The above case is, I believe, unique in character; at least I cannot find another presenting exactly the same features recorded in any English medical journal. The following are some of its most interesting points. 1. The absence of any symptoms commensurate with so grave a lesion. It seems probable that if it had not been for his intoxicated condition he would have presented no particular reason for admission into the infirmary. This, then, illustrates well the difficulties which beset a resident officer when called upon to decide whether or no to retain such a patient, in the former alternative often acting against the direct wishes of the patient. It is best in all abdominal injuries to err on the right side and keep the patient in bed for a few days. This has always been my practice, and one which I have never regretted. No doubt the absence of any serious symptoms in this man was due to

the fact that his last meal at noon had become digested and had passed the seat of injury before the accident occurred. 2. It is difficult, however, to account for the length of time which elapsed before peritonitis set in, as both breakfast and dinner the day after admission consisted of the same food, which in the evening was so quickly followed by death. 3. How was the lesion produced? I think that the wheel must have passed obliquely across the abdomen, grinding the bowel against the vertebral bodies. It is instructing to mark the slightness of the external bruising, but such an association of severe structural injury with little external evidence is not uncommon. 4. Is a cure possible in these cases? In the above the lesion was too severe, notwithstanding the apposition of the ruptured ends. I think, however, that a strict limitation to such liquid food as is easily and entirely assimilable by the stomach, assisted by rectal alimentation, together with opiates and other medicaments on the slightest suspicion of pertonitis, might afford a partially ruptured bowel an opportunity of righting itself. But then there is the difficulty of diagnosis. Moreover, patients feeling as well as ours did at first would not readily submit to so rigid a dietary. It would be interesting to learn whether autopsies have revealed an attempt at union in cases of traumatic rupture of the intestine, and if so, how long after the accident.

Reviews and Notices of Books.

Tropical Diseases. By Sir JOSEPH FAYRER, K.C.S.I., M.D., F.R.S. London: J. & A. Churchill. 1881.

WE gladly welcome this work, since, with the exception of Dr. Murchison's treatise on Diseases of the Liver, and Dr. Stephen Ward's able monograph on some Affections of the Liver and Intestinal Canal, the student of tropical medicine has been without a trustworthy guide to aid him, as the existing text-books on the subject have become obsolete. The medical officer in India is now supplied with a rich mine of knowledge in the various lectures and papers which Sir Joseph Fayrer has collected and brought together in the work now before us.

The volume opens with the author's Lettsomian Lectures on Tropical Dysentery and Chronic Diarrhœa, delivered before the Medical Society in the spring of the present year. The various forms of acute dysentery, and their recognition by examination of the stools, with the valuable prognostic suggestions obtained from the latter, are fully entered upon; and it is well shown how essentially the disease is a curable one if only taken in time. An admirable plan for the treatment of an attack of ordinary acute dysentery by means of large doses of ipecacuanha is indicated, which the young practitioner in India will find invaluable. In discussing, however, the treatment of chronic dysentery, the author is not so happy, and he seems to be either unaware or to have ignored the results obtained at the Seamen's Hospital by Ward, Loach, and Ralfe, in the rational treatment of this truly formidable malady. Sir Joseph Fayrer also appears to have overlooked the suggestion for the employment of voluminous enemata in the treatment of this form of the disease—a plan of treatment originally suggested by the American physicians, and which Dr. Stephen Mackenzie in this country has shown, when carefully and systematically carried out, to give the most satisfactory results.

In the chapter on Abscess of the Liver, the author well observes how obscure is the onset of the disease, and how difficult the diagnosis in certain cases. With reference to this point we notice Sir Joseph Fayrer specifies the inability of the patient to lie on the *left* side as a diagnostic indication. As far as our experience goes, the reverse has often been the case. With regard to treatment, the author advises paracentesis antiseptically, but in cases where Listerism is impossible, he considers a free incision and the use of the drainage-tube the best course to pursue. An interesting chapter on Malarial Splenic Cachexia next follows, and the clinical features of these cases are happily portrayed, especial attention being directed to the danger of performing any surgical operation in advanced cases, wounds under such circumstances being peculiarly liable to be followed by gangrene. The extraordinary disease known as Beri-beri is fully considered. Much light has yet to be thrown on the nature of this affection, and we recommend it to the study of the medical officers of the Indian Army, more especially as regards its pathological anatomy and its association with filaria. Sir Joseph Fayrer suggests a relation between it and pernicious anæmia, and certainly the description of it in the acute form goes far to warrant this theory. Dr. Rowell, medical officer of the Straits Settlement, has perhaps given the fullest pathological account of this strange disease. His investigations seem to show that the spinal cord is the part primarily affected, and he attributes the cause to insanitary local conditions co-operating with climatic influences. We take this opportunity of complimenting Dr. Rowell on the thorough character of his work. It compares favourably with the so-called "special inquiry" instituted at Calcutta, under Government auspices, into the epidemic of 1879. In that report, although 143 deaths are reported to have occurred within three months, we have failed to discover the post-mortem records of these cases.

In the chapter on Bronchocele Sir Joseph Fayrer considers that the malaria which may in one case cause enlarged spleen and liver, may in another cause goitre. We think this explanation more satisfactory than that which holds the disease to be due to impure water. It is impossible, on the latter theory, to explain why the inhabitants of the valley of Aosta are affected, whilst those on the other side of the same chain of mountains escape, although the geological formation is the same, and therefore the mountain streams are of the same chemical composition. With regard to the treatment, Sir Joseph Fayrer has omitted to mention injection of arsenical solution into the growth, so successfully practised by Professor Billroth of Vienna. The chapter on the relation of Filaria Sanguinis Hominis to the Endemic Diseases of India is full of valuable suggestions. The literature of the subject is given, and the researches of Lewis, Manson, and Bancroft described. There is one point, however, to which we would draw the author's attention. He says: "Post-mortem evidence is much needed for ascertaining the seat of the parent worm." In a paper on the subject in THE LANCET of Jan. 1st, 1881, Dr. Manson gives the details of a case in which he found the parent filaria in a dilated lymphatic. This is the first recorded observation. Elephantiasis Arabum forms the subject of perhaps the most interesting chapters in the book. The pathological anatomy, symptoms, and operative treatment are fully entered into. The *rôle* that filaria plays in the causation is, we think, hardly so fully treated as the subject warrants. We may, therefore, refer our readers who wish to complete their acquaintance with this disease to a valuable paper on the subject by Dr. Manson, published in the eighteenth issue of the Chinese Medical Reports.

In the chapter on Sunstroke the various effects that may result from the action of the sun's rays, directly or indirectly, are detailed. We have so recently noticed in these columns the author's paper on the same subject, read before the International Congress, that it is unnecessary to travel over the same ground again. We would merely again emphasise the important fact that no one who has once had an attack of coup de soleil should be allowed to return to India. The clinical history of Dengue is portrayed in a manner reminding one of the masterly pictures of the continued fevers that were given us from the hand of the late Dr. Murchison. The intimate pathology of the affection has still to be worked out. Reasoning from analogy one would imagine that an organism may be the cause in

the same way as in relapsing fever, for we have in the initial fever a rash—the well-marked remission or cessation of the symptoms—and the return of the fever with a second form of rash, symptoms suggesting the presence of a pestiferous germ. In connexion with this subject we may mention that our attention has been recently drawn to a case of acute general dermatitis in this country setting in suddenly, with two relapses, and accompanied by slight pains in the joints, which may have some relation to the disease in question. The concluding chapters of the book treat of the Health of European Children in India, the Rainfall in India, and the Preservation of Health in India, the latter of which we especially recommend to all who may be destined to live in that much abused country. We are glad to find that Sir Joseph Fayrer thinks that a man may, by living hygienically, enjoy good health, for we are certain that much of the disease rife in India has been wrongly imputed to the climate. We regret, however, that the author has not included in the volume a chapter or two on the various forms of fever in India, especially typhoid fever, and its climatic origin, but we trust that he will, in a future edition, supply this deficiency, and so impart to the younger members of the service and profession generally the results of his vast experience, and add to the value of his present admirable contribution to our knowledge of tropical disease.

Abstracts
OF
INTRODUCTORY LECTURES
DELIVERED AT THE
MEDICAL SCHOOLS OF LONDON
AT THE
Opening of the Session 1881-82.

ST. GEORGE'S HOSPITAL.

INTRODUCTORY ADDRESS BY MR. WARRINGTON HAWARD.

AFTER some introductory words of welcome to the students the lecturer proceeded: "I do not think I need say anything to you of the advantages or disadvantages of the medical profession; you will have considered these before your entrance here, and have probably come to the conclusion that the path you have chosen is neither all smooth nor all rough; that it has its special difficulties as well as its special attractions, its grave responsibilities as well as its grateful rewards, its opportunities of good and its possibilities of evil. Neither do I think it would be at all profitable to attempt to advise you as to the method in which you should pursue each particular study in which you are about to engage. That will be told you far better than I can by the teacher of each special subject. What I should like to speak to you about, in the short time that is to-day at my disposal, is the spirit or tone of mind in which, as it seems to me, you may best enter upon your studies as a whole." A question which meets the student at the outset of his career is, How far is he to trust to the dictation of his teachers, and how far to depend upon his own judgment or investigation? "For you cannot wholly depend upon either the one or the other. We should, indeed, be poor, both in knowledge and resources, if we were deprived of the great inheritance of observation and doctrine which has descended to us from our forefathers, or if we accepted nothing from the past of which we had not ourselves tested the accuracy and the value; but, on the other hand, unless we duly exercise our judgment it will become enfeebled by disuse, and, like the weakened muscles of disease, liable to irregular and errant action, and easily turned aside by the smallest obstacle. The knowledge of to-day is built not with fragments from the ruins of the past, but with new material added to the solid structure which has stood the test of time. We must perforce avail ourselves of the basis furnished by the labours of those who have gone before; but we must know well the foundation, see that it is firmly established, and that the superstructure stands erect, and beware of the bias of prejudice or passion, remembering that every such deflection from uprightness introduces an element of instability into the edifice, so that the more it is added to the more dangerous it becomes, and the nearer it is to its inevitable downfall. He, therefore, who in arrogance or self-conceit despises the teaching of his predecessors, and believes only in himself, is equally in error with him who, either from feebleness or idleness, yields his independence of thought to, and takes his opinions from, another. How, then, are we to steer between these two dangers? How, while imbued with the lessons of the past and yet receptive of the influences of the present, can you best use them both for your secure progress in your studies, and the attainment of the knowledge that will best help you in the exercise of your profession?" This question, it was pointed out, involves the right balance of liberty and authority, and its consideration was the chief matter of the discourse. It was shown that the knowledge which has been arrived at by the observation, investigation, and reasoning of the master minds of medicine should be sought for from its teachers, but that a first essential for the profitable reception of the teaching of others is that we approach our studies in the student frame of mind—that is, with the consciousness that there are others who know more about the subject than ourselves. The lecturer did not think that the proper and philosophical state of mind for students was one of profound scepticism of everyone and everything except themselves. "Rather," said he, "let me advise you to remember at the outset of your studies what we in the progressive studies of our lives discern more clearly every day, that 'there are more things in heaven and earth than are dreamt of in our philosophy,' that even within the limits of our own special studies there are many more things than can by us be known, at least at present, and many others which are as yet but dimly seen, and that concerning all the Hippocratic maxim still holds good that 'true judgment is difficult.' The consciousness of the imperfection and deficiency of our knowledge should engender in us modesty, toleration, and caution, mental qualities no less becoming than profitable to cultivate, while the sense of the vast extent of the unknown which invites our investigation should add the stimulus of enthusiasm." These mental qualities were each considered. Modesty, a due sense of the proportion which we bear to the rest of the world—developed therefore in proportion to the amount of real knowledge attained. Toleration naturally followed upon modesty, and the recollection of our fallibility, and of the difficulty of attaining absolute certitude. Caution was the best guarantee for real advancement in learning; and that it was not opposed to real progress was shown by the examples of Bacon, Hunter, and Darwin. Enthusiasm gave the healthy stimulus and inspiring influence needful to overcome difficulties and failures. The following questions were then discussed: 1. What facts and doctrines are there in medicine so certainly known and established that they may be taken for granted and used as a basis of action? 2. What authorities are we to trust, and what are to be the limits of our assent? 3. Wherein are we bound to investigate for ourselves and to claim full liberty of action? In connexion with the first question, it was shown that the doctrines to be received must be established by credible witnesses, received by competent judges, and confirmed by sufficient experience, and that many of the beliefs in medicine upon which we are daily acting are the dogmata of the ancients, sanctioned by time. Under the second question the limits and criteria of authority were considered, and it was held that its dicta should, when possible, be submitted to the criticism of reason, and that no penalty should attach to not accepting them. In answer to the third question, it was said that "whenever we advance towards the unknown we are bound to use all available means of inquiry and to claim full liberty of judgment. This is the plea for the scientific use of the imagination, and for the free play of the speculative as well as of the critical faculties." The application of these principles to the study of medicine having been explained, the lecturer concluded with some advice on the right use of the knowledge thus gained. "Our business," he said, "is the prevention, the alleviation, and, where possible, the cure of disease," and he entreated his hearers not to think too exclusively of the last and to forget the importance of the first two of these functions. Seeing, too, that their profession was one involving much responsibility and care, and needing at the same time an habitual calm-

ness of mind, he advised them to alternate their labours with the rest of reasonable recreation, for which there was nothing more refreshing than the study of natural beauty and the art which has striven to represent it. Finally, it was shown that both in Science and Nature there was the same evidence of the ever-present influence of authority; that life was the manifestation of law and order; disease a *dis*order, an endeavour to escape from authority; and that death would seem to be the triumph of disorder over the order of life—a dissolution of the bonds which hold the elements of the body in co-operative union—a release from a beneficent authority into a baneful and destructive liberty, were it not for the recollection that there is an Authority even over death; that it is but the night through which we all must pass to enter on the everlasting day; that even here completest liberty is only to be attained by deference to Authority, for the Authority is of Him "whose service is perfect freedom."

MIDDLESEX HOSPITAL.

INTRODUCTORY ADDRESS BY DR. DOUGLAS POWELL.

AFTER a few words of cordial welcome to old and new students on the part of his colleagues and himself, Dr. Douglas Powell proceeded to observe that there was at this time of year but little temptation to depart from the special purpose of an address introductory to the work of the coming session, "for in the past autumn all topics of general interest had been exhausted; the harvest of science had been gathered, the harvest festivals held, the fruits of the year garnered, and seed-time had again commenced." He congratulated his audience on having chosen medicine for their profession. It was the most interesting and beneficent of callings. As a science medicine embraced a wide and free range of thought, ever seeking out what was true. The relief of suffering and the endeavour to preserve human life to the maximum term allotted were the objects justifying medicine as an art. "Fortunately for her stability in this age of tottering dynasties and threatened institutions, the aims of medicine were aside from politics. Her growth must be with the growth of civilisation; her teachings and purpose took an ever-deepening root in the selfishness, if not in the philanthropy of mankind." Dr. Powell pointed out how the most dry details of elementary study in medicine became profoundly interesting when the light of a better knowledge of their application and bearing was reflected upon them, and he urged the students in what he termed the anatomical period of their career to observe the more obvious phenomena of health and disease, such as the heart sounds, breath sounds, body temperature, secretions, pulse characters, and the like as matters of mechanism, of chemistry, of nutrition changes which were within their ken, and which reflected increased interest upon the anatomical, physiological, and other work more proper to this period of their career. The more advanced students should still pursue their studies upon the same lines, "proceeding from healthy anatomy and physiology, with which they were now familiar, to consider those alterations of structure and perversion of function and nutrition which constituted disease." For pathology could not be separated from physiology. Every opportunity should now be taken to study the natural history of disease, and to gain experience by practical work in the wards and by holding, whenever they could get a chance, offices of responsibility in the hospital. Actual experience was the only counterpoise to that weight of responsibility which pressed so heavily upon the medical practitioner. In acquiring this experience he asked his hearers not to be content to study only the acute phases and the last results of disease. A more careful observation of the various steps of that happier solution, which the majority of the disease problems that came before them underwent, would teach them the brighter side of pathology, to disregard which tended to fatalism in prognosis and to vacillation in practice.

Dr. Powell then gave some examples illustrating the vicissitudes of repair and convalescence, the rapidity with which disease products were sometimes removed, and how, in the course of such removal, symptoms might sometimes arise, due to the presence of an overcharge, so to speak, of effete materials in the blood. Here was a source of secondary disease from too great an eagerness on the part of Nature in her reparative efforts which it was well to ponder. Compensation was another great feature in the natural history of disease, in effecting which the reserve powers, inherent in organic structures which constituted our wealth of vitality, were called forth and developed. "Compensatory function was the *modus vivendi* in chronic disease. The sources and methods and paths of compensatory function would afford them a rich field for interesting and original research." All knowledge respecting it was to be gained from practical observation in the wards, little or none from books. The vicarious principle by which one set of organs temporarily bore the burdens of another set was also frequently illustrated in medicine. He did not invite attention to these phenomena of the natural history of diseases merely for the satisfaction their study would afford, whether as intellectual exercises or as matters of purely scientific interest; they were the essential conditions of life to thousands of people, and to start, to stimulate, and to maintain them in chronic illnesses were the grand objects of our art, in attaining which some of the most brilliant triumphs of therapeutics were achieved. The possibilities of compensatory, reparative, or vicarious action in any given case formed the grounds for a rational prognosis, and prompted a judicious treatment. Nature required not only watching, but aid, direction, and control in her doings. Her attempts at repair even were not always timely, and would sometimes prove disastrous were it not for the interference of the surgeon. Dr. Powell next addressed his observations more especially to those who had completed their studies and were passing on to the practice of their profession in the public services, the town, the country, or the colonies. He pointed out that the work of hospital physicians and surgeons was largely educational. In their hasty interviews with their poor patients they were constantly advocating the laws of hygiene—cleanliness, temperance in all things, directing the care of children, instructing in diet, &c., and in the aggregate their work in this direction was of immense value. Public hospitals and convalescent institutions, well ordered as they now were, inculcated lessons of decency and cleanliness in many cases unknown before. But the doctor in private practice throughout the world was literally teaching from door to door the laws of healthy living, which were in greatest part identical with the purest morality. We might all well think more of this. The doctor might give a friendly hint to many who were not accessible as yet to higher teaching. Referring to the oft-witnessed fact that everyone around the sick man's couch saw the approach of death save himself, Dr. Powell touched upon the duties of the physician in this matter. In starting, especially for country or colonial practice, he urged the importance of a thorough equipment, and of a supply in portable form of remedies ready to hand. They must not be content with carrying with them only the means of diagnosis. He commended the Army Service to those fond of travel and interested in investigating the effects of climate. Some of the most interesting and important questions in medicine had been and were to be worked out by military surgeons. Dr. Powell concluded his address by observing that just as the chief labours of early studentship consisted in the foundation studies of anatomy and physiology, and as that of later studentship was concerned with the natural history of disease, not only regarded in its acute phases and ultimate results, but including the phenomena of repair and convalescence, the development of compensation and vicarious function, and the modifications effected by treatment; so in the still more advanced stage of studentship which some amongst them were but now commencing, and from which the earnest practitioner never emerged, we had yet to learn much of the beginnings of disease, in individuals, in families, in communities. Here was worthy labour for many lifetimes.

ST. MARY'S HOSPITAL.

INTRODUCTORY LECTURE BY MR. FIELD.

THE introductory address was delivered at this hospital by Mr. G. P. Field, the aural surgeon. Having welcomed the students to their new work, the lecturer began with a short sketch of the history and formation of the school and hospital. In these remarks he incidentally mentioned the fact that the latter would be shortly enlarged considerably, through the liberality of Mr. Stanford, who has lately left £25,000 to establish a new wing. He then passed to the important question of medical education, and after advising the students systematically to pursue their studies as laid

down for them in the curriculum, he remarked that it was wise to select for special consideration one or more of the collateral sciences, not directly connected with the practice of their profession, such as botany and comparative anatomy. These pursuits would be a source of pleasure and profit to them, not only during their student career, but in after-life. From matters affecting their welfare individually, the lecturer referred to those of more direct interest to the profession itself and to the public at large. First he touched on the so-called honours accorded to the leaders in medicine. He asked whether the sister professions would be content with a baronetcy, or even may be a knighthood, for services rendered to the State. France in such matters sets us a noble example. As regards special hospitals, Mr. Field thought that they were, except for a limited class of cases, such as children, fever, and one or two others, of little use as educational powers, and highly injurious to the practitioner. He advocated specialism as a system, but strongly urged the authorities of the general hospitals to encourage it by establishing departments to be presided over by men specially trained for the work. St. Mary's was to be congratulated on moving in this direction by the appointment of Dr. Crichton Browne to the chair of Mental Disease, and Mr. Critchett to that of Ophthalmology. Out-patient departments were of great value to the poor, nevertheless there was at present much room for reform, as there were hundreds that apply for relief who could well afford to pay the usual fee. Speaking of the manner in which hospitals were supported, he said:—"Take the labouring classes and ask what they do for the hospitals, from which they of all others chiefly derive benefit. Annual subscriptions and donations flow almost exclusively from the middle and upper classes, and the £30,000 yearly collected on Hospital Sunday come from the same source. The Hospital Saturday may be looked upon as the offering of the working classes, amounting only to about £5000 a year. Now, if 3,000,000 out of every 4,000,000 in London subscribe but a shilling per annum each the contribution would be £150,000. It is therefore obvious that the working people of London subscribe less than a halfpenny a year each to the support of their hospitals. Poverty cannot be pleaded, as a recent statistical investigation has shown that in a single square mile in a poor neighbourhood in London £400,000 is spent in drink in one year." He thought it was a crying evil "that general hospitals in this great and fabulously rich city should be obliged to close their wards for want of funds, while other places of little worth were springing up daily from the importunity of clever promoters, who set to work in the same way as they would float a company." The lecturer, speaking of some of the more prevalent fashions of the day, said: "Can anything be more ridiculous than the oracular utterances of the so-called æsthetes, to say nothing of their gestures, movements, customs, and other peculiarities!" He then passed to other practices more dangerous to health, such as tightlacing, and that pernicious system by which young women are compelled to stand for hours in the unwholesome atmosphere of the shops. "These abuses have been much discussed in the medical journals, but as yet with no adequate result. The ignorant woman of fashion (I do not say all are ignorant) whose mind is fixed on the wherewithal she shall be clothed, neither knows nor cares for the misery behind the scenes. We have only to throw the whole weight of our influence as medical men into the scale and most of these abuses would be quickly abolished. A great deal has been said," remarked the lecturer, "about the antagonism of science and religion. Paget observes 'You will find among scientific men very few who attack either theology or religion; the attacks imputed to them are made, for the most part, by those who, with a very scanty knowledge of science, use, not its facts, but its most distant inferences, as they do whatever else they can get from any source, for the overthrow of religious belief. When two beliefs seem incompatible, it does not follow that one is true, and the other false, they may both be true, and their opposition may be due to their both being ignorant of some intermediate truth, which, when gained by increasing knowledge, will combine the truths they now hold apart.'" He then concluded in the following words:—"I have ventured to counsel you as to the mode of beginning and continuing your medical life. I have pointed out some of the abuses of our time, regarding which it is our duty, as medical men, to speak plainly, 'for if the trumpet give an uncertain sound, who shall prepare himself to the battle?' It will be for you to carry on these reforms, and 'to pass the torch of truth from hand to hand.' I have just told you what has been effected by great men of late years, and have especially dwelt on the achievements of our own profession. As much as has been done can be done, and more. We cannot all secure distinguished success, but we can all gain an honourable position in society, our chief reward being the knowledge of benefits rendered to mankind. As your opportunities are great, so too are your responsibilities, for it is human life that is entrusted to your care, and human suffering that you are called upon to assuage. You will often hold the balance of life and death in your hands; let this knowledge be an incentive to labour diligently, to begin well, remembering that 'we must all work while it is day, the night cometh when no man can work.' Permit me, gentlemen, as one deeply interested in your welfare, to entreat you to refrain from grasping at the fleeting and deceitful shadows of life. Cling earnestly and firmly to everything that is honest and true. Let a strong sense of duty pervade every thought, word, and deed. Then, and then only, can you reasonably expect to ride calmly through the storms of this troublesome world into the haven of perfect peace. You will then be able to look back with feelings of satisfaction upon an honourable career, in which it has been your privilege to mitigate the sufferings of that being of whom our great dramatist has said, 'What a piece of work is man! How noble in reason! how infinite in faculties! in form and moving, how express and admirable! in action, how like an angel! in apprehension, how like a god!'"

ST. THOMAS'S HOSPITAL.

INTRODUCTORY LECTURE BY DR. BERNAYS.

DR. ALBERT J. BERNAYS opened the session by an address, which he commenced by thanking the treasurer and governors for the support which they had so generously given to the staff and Medical College. He also in the name of his colleagues welcomed the many friends who came to the support of the institution. Nor would he fail to remember the honour done to one of his colleagues, so richly deserved, and so promptly carried out. The title conferred by her most gracious Majesty upon him assures us of the interest of Royalty on our noble profession, and the fact that it has been ably sustained by Sir William Mac Cormac.

Dr. Bernays then addressed himself to the students, and, amongst other judicious hints for their future guidance, proposed that the third and fourth year's men should consider it their duty to help and encourage their juniors in time. Touching on the scepticism in religious matters, liable to follow scientific research, he remarked that in his youth the denial of the Mosaic cosmogony constituted infidelity; whilst now a man was not even thought a fool who suggested that the beginning of all life upon our globe might be accounted for by the fall of a meteorite. To the late illustrious Dean Stanley the lecturer then paid full tribute (he having recently distributed the prizes at St. Thomas's), remarking that he well deserved the title bestowed on him by Mr. Simon, "The liberator of the conscience of mankind." Students of medicine should be the last to suggest *cui bono* as to research in science. "Well do I remember," said Dr. Bernays, "a former student, exercised in mind by the reactions of chlorine upon alcohol, finding no satisfaction in the production of chloral, saying, 'What is the use of it?' The very next day he informed me of the discovery of Professor Leibreich in the application of chloral hydrate. Consider, again, the antiseptic treatment; the benefit it has already wrought for man. We owe all our present knowledge to experiment. From what we already know of the germ theory, our hopes are great in the preventive treatment in medicine and surgery. Who shall say what inhalation may not bring about when the action of disinfectants is better understood? Experiments in this direction might be undertaken by advanced students." This led to a repetition of a former suggestion made by Dr. Bernays in the Transactions of the hospital. At every medical school there are many able young men who, if means could be found, would delight in remaining another year or so at the hospitals, the increased experience they would thus gain being of immense advantage to the public. As no modern education can be considered complete without some knowledge of physiology, our medical schools being distributed over London and the provinces should furnish

centres for teaching physiology and chemistry practically and theoretically. In the place of a system of centralisation we should have colleges most advantageously placed, for the convenience of a large and scattered population. South Kensington, with reference to London, reminded Dr. Bernays of a scene in "Nicholas Nickleby." Mr. Squeers is boasting of the fatness of his son, as proving the quality of the feeding at Dotheboys Hall, whereupon the gentleman to whom he appeals declares that the boy has got the whole of it. Everything is starved for South Kensington. It is a waste of means that the museums, lecture-rooms, and laboratories should be so little employed compared with their capabilities. What a spur it would be if clever students could look forward to continuing to walk the hospitals whilst they gave a portion of their time to teaching in the laboratories under the guidance of the respective professors. Dr. Bernays remarked that it could only be in laboratories properly appointed for the purpose that the requisite time could be given for the analyses of the various quack remedies which last year paid £140,000 to Government for stamps alone. From the advertisements vaunting wonderful vegetable preparations over known remedies, which flourish most in religious papers, one is led to speculate somewhat curiously on the credulity in matters medicinal of their supporters. The various drinks, manufactured and natural (?) clogged with elements that require skilful and intelligent use in cases of disease; mineral waters, the published constituents of which are as imaginary as their virtues; these and such as these are matters which can only be combated by an intelligent use of the knowledge gained by chemistry.

Dr. Bernays further showed that little can be done in research without expensive apparatus, and that our farther advancement in knowledge greatly depends on it. Comte stated, in 1842, that it was hopeless to expect to determine the composition of the heavenly bodies; nevertheless the spectroscope has to a great extent revealed it. At present our knowledge was insufficient to dogmatise as to the nature of the elements, although the part played by motion seemed the most promising field for research. Not long since the idea that electricity could compete with gas was considered the dream of an enthusiast. Now it is probable that coal will be made to yield larger quantities of a less luminous gas at a low cost for heating purposes, leaving electricity to produce the illumination we require. This, and the use of properly constructed stoves, would be at once the most economical, and remove the terrible smoke nuisance.

Dr. Bernays concluded his lecture by an interesting account of the progress made in constructive chemistry.

WESTMINSTER HOSPITAL.

IN the absence of Mr. BOND from illness the introductory address at the Westminster Hospital was read for him by Dr. Allchin, Dean of the Medical School. The first portion of the address was devoted to a detailed account of the medical curriculum, which was described as being the resultant of Royal Commissions, Acts of Parliament, decrees of the Medical Council, and regulations of the licensing bodies, but, nevertheless, still remaining far from perfect. A contrast was drawn between the present system and the old apprenticeships, whereby much useful knowledge was gained, and for which some substitute now would seem to be necessary. The compulsory period of four years for education was shown to be inadequate for the requirements of the widely extending sciences included in the professional course. The advantages of small schools in affording students better opportunity for work, and for holding minor hospital appointments, were dwelt upon. The relative importance of lectures, books, practical work, and tutorial classes was fully referred to, and occasion was taken to point out the great advantages enjoyed in these directions by the students of the present day. The lecturer advised caution in forming friendships, and deprecated a too assiduous devotion to athletic sports, which he regarded as becoming a far too prominent and even dangerous feature in medical as well as public schools. The existence in the United Kingdom of nineteen examining boards, all empowered to grant qualifications as various in their titles as they are unequal in the amount of knowledge requisite to obtain them, was condemned as a scandal, and the substitution of a single uniform examination was strongly advocated. The address then went on to describe some of the advantages offered by the profession, which, far from being overstocked, as is so generally the case in most other pursuits, affords to the student the opportunity of a livelihood directly he becomes qualified; looked at, therefore, from a financial point of view entering, the medical profession may be regarded as a safe and fairly good investment for a man whose means do not extend beyond providing him with his education. The wide range of choice which the doctor has was mentioned as a further inducement; hospital work, private practice in town and country, the army, navy, and Indian medical services, colonial, poor-law, and sanitary appointments offer a wide and varied field to choose from. The very important question of specialism in practice was shown within certain limits to be the legitimate outcome of the vast area covered by the healing art, no less than of the popular demand, though it behoved the profession in the interests of the public to exercise great precaution against any undue extension of the principle as dangerously tending towards quackery. The most efficient safeguard was the enforcement of a high standard of general medical education, leaving it to the individual when qualified to devote himself to any special branch as opportunity or inclination might suggest. Thus only could it be ensured that a specialist should know his subject and something else, instead of knowing something of his subject and nothing else. The formation of special departments in the general hospitals was described as of great benefit to patients and to students, but the development of special hospitals was far from being regarded as an unmixed good. The social position enjoyed by the medical man, though not marked by titles as conferred upon the church, the bar, the services, or trade, was spoken of as being peculiar in itself, and granted without hesitation to everyone who should prove himself not unworthy. Notwithstanding the confidence and trust placed by the public in their doctors as individuals, indications were not wanting of a disposition to treat them collectively with gross injustice, and ascribe to them a want of common honesty and honour. The recent legislation upon vivisection might be taken as one example. The absence of direct representation in Parliament of the medical profession was noticed as a singular fact, considering the number of questions affecting the health and happiness of the community in which they were concerned. In conclusion, the reader bade a hearty welcome to the freshmen, urged renewed efforts upon the older students, and wished success and prosperity to all.

The proceedings terminated with the distribution of prizes for the past year by the chairman, Dr. Fincham.

PHARMACEUTICAL SOCIETY.

THE introductory address of the winter session was delivered by Dr. CHARLES SYMES, on October 5th, at the Pharmaceutical Society, Bloomsbury-square. After some general advice to students, the lecturer referred to pharmacy as a profession. It was not, he said, his wish to ignore the trade side of its character, but he held that it would be just as illogical to argue that pharmacy was not a profession because it was practised in premises devoted to business purposes and amongst articles of commerce, as it would be to argue that the spirit of man was not a spirit because it dwelt in a material body and amongst mundane things. He denied, as some supposed, that the whole business was passing out of their hands; but that the process of "natural selection," which was going on all around them, should hesitate to make itself known in the domain of pharmacy, would seem strange, and they could scarcely hope for such immunity. If they allowed nature to take its course, pharmacy would emerge from the furnace all the better for the refining process it had undergone. Whilst the present state of things existed he would certainly not advocate that any active steps should be taken to rid the business of its commercial surroundings. They should exert themselves to effect its development, and to replace that which was lost by something more closely allied to their profession. Pharmacy covered as large a field as the other branches of medicine if cultivated to its fullest extent; and if the labourers therein would foster a spirit of inquiry into the nature of their surroundings, not for the purpose of fault-finding, but with a firm resolve to apply themselves to the development of its utmost resources, then it would undoubtedly prove equally fruitful.

Analytical Records.

DELACRE'S EXTRACT OF BEEF.

THIS extract is said to be prepared near Buenos Ayres, where beef is at all times exceedingly cheap. Our examination convinces us that it is correctly described by Professor Attfield, who reports it as "genuine extract of beef of best quality." It is highly nitrogenous, is easily soluble in cold water, and has the true meat flavour, without any of the burnt taste so often observed in extractum carnis. Its importation from South America is a useful addition to our food supply.

LLOYD'S UNIVERSAL FOOD (PATENT COOKED MALTED FARINACEOUS).

(J. & C. LLOYD & CO., VERULAM-STREET, GRAY'S-INN-ROAD, LONDON.)

A well prepared food, highly nitrogenous, and easily digestible, suitable, as we think, for the use of adults as well as of infants and young children. It is perfectly free from grit or husk that might irritate the intestine, and is pleasant in flavour.

VICTORIA MINERAL WATER.

(J. G. N. UNGAR, BUDAPEST, AGENTS, MALTINE COMPANY, GREAT RUSSELL-ST. BUILDINGS, GREAT RUSSELL-ST., BLOOMSBURY.)

This remarkable and powerful natural aperient has been analysed by Professor Roscoe of Owens College, who finds about 33 of magnesium sulphate and 17 of sodium sulphate in 1000 parts by weight of the water. It is guaranteed to contain 55 parts in 1000 of solid matter, equal to 3850 grains per gallon. The ordinary dose is one wineglassful, and there can be no doubt of the efficiency of the remedy.

LACTROSE. A FOOD FOR INFANTS AND CHILDREN.

(CORBYN, STACEY, & CO., HIGH HOLBORN.)

Messrs. Corbyn have produced a food for infants which is, we think, in all respects satisfactory. So many new, and in many respects similar, food powders for infants have appeared within the last few years that only experience can decide which is best. All that we can say of this last candidate for public favour is that it appears in every way worthy of the high reputation of the firm from which it emanates. It is highly nutritious, and when properly prepared will be digested without difficulty.

FLETCHER'S CONCENTRATED LIQUORS FOR THE EXTEMPORANEOUS PRODUCTION OF CHEMICAL SYRUPS.

(FLETCHER & FLETCHER, HOLLOWAY, LONDON.)

The following samples of these liquors have been sent to and examined by us:—

Liquor ferri iodidi.
Liquor ferri phosp.
Liquor calcis lacto-phosp.

They are all good and extremely convenient, for they only require dilution with simple syrup to yield the ordinary syrups. Syrups are very troublesome, especially in country practice, on account of their liability to change, and Messrs. Fletcher may be congratulated on having overcome this difficulty. Syrups prepared in this way will of course be uniform in action, and appear, moreover, to have the additional advantage of being economical.

Messrs. Fletcher have also lately introduced two new syrups of hydrobromates—namely:

Syrup. ferri et quiniæ hydrobromat., and
Syrup. ferri et quiniæ et strychniæ hydrobromat,

each of which we have examined, with satisfactory results. The latter resembles Easton's syrup.

CEREALIS.

(J. STRUVE & CO., BRIGHTON.)

This is an effervescent beverage, the basis of which is stated to be barley-water, either alone or mixed with a small portion of extractum carnis. The idea is said to have been derived from some remarks of our own, and we are certainly inclined to believe that the lowering action of aerated drinks will be effectually remedied by this addition. The beverages are very pleasant to the taste, and possess a peculiar softness on the palate, due doubtless to the new ingredients.

CLOS HAUT PEYRAGUET.—CHATEAU VEYRES.

(E. GRILLON, PROPRIÉTAIRE, QUEEN-STREET, E.C.)

Considering the great and rapidly increasing popularity of red claret in England, it is wonderful that Sauterne, which is a white claret, is so little used. There is hardly a finer wine in existence, and, instead of being the thin and acid beverage which many people suppose it to be, it is one of the most generous and high-flavoured of the gifts of the grape. It is, indeed, totally unlike what we know in England as claret, for it is a sweet, almost a luscious wine, with a powerful and most peculiar bouquet; and, as we showed in our first Report on the Medical Use of Wines (THE LANCET, vol. i., 1880, p. 1001), the finest samples always contain most sugar. The fact is, our countrymen do not take readily to wines they do not know, and English experience in regard to Sauterne has not, on the whole, been satisfactory. Most of us occasionally drink a disagreeable fluid labeled Sauterne; and very many have tasted the famous Château Yquem—delicious, but very dear. Few, however, seem to be aware that good Sauterne can be had for a price that all can afford, and that, in fact, the wine is quite as cheap as decent claret. The wines we are now noticing would alone suffice to prove this, for both are good—the first, indeed, excellent; and yet Clos Haut Peyraguet costs only forty-eight and Château Veyres only twenty-four shillings a dozen. The Report to which we have previously referred has sufficiently indicated the cases in which Sauterne must be avoided; in many we should look upon it as a valuable medicine.

New Inventions.

ARNOLD'S NEW VAGINAL AND RECTAL TUBE.

MESSRS. ARNOLD AND SONS have forwarded for our inspection a tube which can be used for either vagina or rectum. It is made of vulcanite, but between the stopcock and the bulbous end is a portion about three inches in length,

quite flexible. By this means the necessary rigidity of the end with thorough flexibility of the stem is attained without a joint. It would be next to impossible to do any injury with such an apparatus, and it appears to be a real improvement without complexity or countervailing disadvantage.

STEVENS' SMALL DISSECTING CASE.

MESSRS. J. STEVENS AND SON are the makers of some very small handy dissecting cases. On lifting the lid of the case a pair of scissors, dissecting forceps, and two scalpels are seen, each in its own compartment; but the knives have their points projecting, and are withdrawn by seizing their ends, and in removing the forceps the fingers must come into unpleasantly close contact with the blades, so that the constant use of the case is attended with danger.

THE LANCET.

LONDON: SATURDAY, OCTOBER 8, 1881.

THE annual medical festival has again come round, and the medical schools have resumed their wonted activity. At the greater number of the metropolitan schools the customary introductory address was delivered, but the absence of such address or of any substitute for it at four schools, including the two largest, brings into great prominence the question of the value of introductory lectures. To us it appears that there is much to be said in favour of the custom of inaugurating the session with a general address. Its very age ought to excite reverence, and the great ability often displayed in the addresses should also serve to keep alive the practice. But its great justification lies in the fact that the public are supremely ignorant with regard to the processes of medical study; our students, therefore, come to the schools with little or no knowledge of the nature of the career before them, or of the methods most likely to prove of value, of the true work of the profession and of the spirit in which it is to be prosecuted. The teachers at the medical schools are also those most conversant with the progress and development of medicine in general, and of certain parts of that complex science and art in detail. And we may well ask if they have not some words of advice to give to the student just embarking on his life work, or help for those soon to launch out on the broad ocean of independent practice? Is there so little reverence for "authority"—on which Mr. HAWARD discoursed so well at St. George's—among medical students, that it is wasted strength to try to temper the zeal of youth with the discretion of experience? Does not growing knowledge enable the possessor of it to mark out to great profit certain departments of medical inquiry in which independent work is likely to be unusually productive, as was attempted by Dr. POWELL? Without the intention, there is no doubt the semblance of a lack of sympathy with the many perplexities incident to a medical student's career from commencement to close, on the part of the teachers of those schools where the introductory address has been given up.

There is little difficulty in tracing the causes which have led to this result. [One is the difficulty experienced by many of the lecturers in investing their subject with either novelty or interest, and as the selection of an orator is generally made in some form of rotation, and not on account of any special aptitude for the duty, this has sometimes been only too apparent. But along with this has been a rather persistent attempt to divert this occasion from its true end. Anything and everything has been talked about except the matter of most interest—the medical student's course. The opportunity has been seized to address the public at large on medico-social or medico-legal topics, and the obvious incongruity of such addresses has induced a dislike of the practice. The addresses which we print in full or in abstract to-day show that this year at least this fault has not been committed, and the lecturers have, one and all, kept pretty closely to their text, and have striven, with varied success, to help their younger brethren along the earlier stages of their course. The subjects discussed have been various, and variously treated. Nearly all the lecturers have spoken truly of the nobility of the medical profession, and of the wisdom of the choice of their audience, and Mr. BOND in particular laid stress upon the fact that a medical qualification at once enables its owner to at least support himself, and in this respect offers a marked contrast to the similar licences in the professions of the Law and Divinity. Another point brought out prominently in many addresses is the close dependence of medicine upon physical science, and the necessity of preparing for its practice by as full a knowledge as possible of those sciences, and by the pursuit of knowledge after scientific methods. Dr. POORE ably showed that medicine is not a scientific entity, but the resultant of many sciences, and that a knowledge of it is only obtained in proportion as these sciences are studied in their due relation. For the rest, the subjects taken differed much. Mr. BOND contented himself with a useful review of the medical curriculum, and with good advice applicable to the various phases of medical study. Sir JOHN LUBBOCK gave a very general address, full of apt hints, which we hope will be largely acted upon by his hearers; coming from a man whose many accomplishments show how much can be done by an economical and judicious use of opportunities, they are especially valuable. Dr. POWELL addressed himself chiefly to the senior students, and spoke of some of their most pressing responsibilities in practice, and also showed them directions in which they might prosecute careful independent research with great advantage. Mr. HAWARD discoursed cleverly on the influence of authority and liberty in the study and practice of medicine, and showed how the one must be balanced by the other, and where and how far each is useful and legitimate. Those who are familiar with the disastrous results of acting upon a wrong solution of this problem will be glad to find that it has been thus dealt with, and will recognise how good a choice of subject was made by Mr. HAWARD.

Mr. FIELD repeated a recommendation made by Sir JAMES PAGET in his address at Cambridge in 1880, to study especially one or other of the collateral sciences not directly connected with the practice of the profession; and then alluded to the small share of public honours which falls to the lot of the medical profession, to the almost contemptible support our great hospitals receive from the classes they most benefit, and to the many evil fashions and habits which a more general knowledge of the facts of physiology and the laws of hygiene may be hoped to correct. It is never without some regret that we hear or read remarks on the scant public honours bestowed on the more eminent medical teachers and practitioners; there is at least something singularly incongruous in scientific workers and humanitarian practitioners seeking popular applause and distinction; their true reward is always found, and should be only sought, in quite other directions. Dr. BERNAYS alluded to the practical value of many discoveries which at first seemed but barren facts, and illustrated the truth that all knowledge may be turned to practical account. He repeated a suggestion he has already made, that some means should be devised whereby the best students at the end of their four years of study should be provided with

scientific work, and he cast a jealous glance at the rich and prosperous South Kensington Museum and Schools. There is something to be said in favour of this proposal, but the direction in which reform is more needed is in the lengthening of the curriculum and in enforcing a better acquaintance with natural science. Mr. PEMBERTON showed that at Birmingham every facility is afforded to obtain a thorough medical education, and that within a brief period opportunities for scientific teaching and study, as well as for hospital practice, general and special, have developed to a high degree. Nor is this true of Birmingham alone, as there are others of our great provincial centres which can make the same boast, and it is evident that the metropolitan schools will not, in future, have the almost exclusive control of the medical education of the country that they have enjoyed in the past.

Dr. POORE'S address, which we print in full, is sure to excite attention both from the subject matter and the clever way in which it is handled. There is much to be said in favour of his suggestion of a definite international scientific language, and this might be readily adopted in botany, materia medica, anatomy, and physiology. It is not easy, however, to see that the general use of an international language can be combined with the employment by each country of its own vernacular; to a large extent this very practice has led to the confusion Dr. POORE laments. Every science has its technical terms, whose chief value lies in their precision—the very soul of science. In pointing out the too frequent and often unnecessary use of technicalities in medicine, Dr. POORE has no doubt hit upon an evil, and his note of warning ought to prove especially useful to his student audience, to whom, above all, the practice of using long and often misunderstood terms is dangerous. The temptation to substitute them for a clear comprehension of that which they should signify, and to use them more or less as charms, is particularly fascinating to some minds, and can but lead to the result always attendant on the folly of grasping the shadow for the substance.

Surely those who had the opportunity of hearing such addresses as these will not regret it. They have begun their year's work with a far better start than can be afforded by *soirée* or dinner, however sociable and enjoyable; and we cannot but think that it would be regrettable if such addresses were altogether discontinued.

THE remarkable consensus of opinion of the distinguished men who met together at the recent International Medical Congress concerning the necessity of securing to English physiologists and pathologists a reasonable licence in the performance of vivisectional experiments should not prove altogether fruitless. The lay public did not fail to notice the opinion of the foreign *savans*, and even professed anti-vivisectors were startled out of their ignorant complacency by the onslaughts of Professor VIRCHOW in his address on the Value of Pathological Experiment, and by the subsequent attacks of the veteran and venerable anatomist, Professor OWEN, on the occasion of the unveiling of the HARVEY memorial at Folkestone. To the long list of services rendered to science and humanity by the discoveries of vivisection enumerated by Professor VIRCHOW in his spirited and enlightened address, Professor OWEN added the elucidation of the fundamental principles of HUNTER'S operation for the cure of aneurism. In illustrating the value and utility of vivisection, Professor OWEN dwelt on the observations and experiments made by HUNTER on the growth of the antlers of the stag, in so far as reflection on these observations and experiments led HUNTER to conceive and apply the scientific surgical procedure that bears his name for the cure of spontaneous aneurism.

In July, 1785, HUNTER tied one of the external carotid arteries of a stag in order to study the effect upon the nutrition and growth of the corresponding antler. Soon after the application of the ligature, the antler which was half grown became cold to the touch, and HUNTER debated within himself whether it would be shed in due time or be longer retained than ordinarily. But on examining the antler a week or two later, when the wound around the ligature was healed, he was surprised to find it warm and still increasing in size. He doubted whether the vessel had really been tied or not. The stag was therefore killed, and the parts examined. It was then ascertained that the artery had been properly secured, but that certain small branches above and below the seat of the ligature had enlarged, and by their anastomoses had restored the blood-supply to the growing part. Thus was reaffirmed a truth previously known but to a few, that the distal parts do not necessarily die when the main arterial trunk is tied, because the circulation of the blood is maintained by means of collateral and anastomosing branches. This fact, apparently new to HUNTER himself, if we may judge from his surprise at witnessing it, did not lie dead and useless in his active and sagacious mind.

In the month of December following a man with popliteal aneurism was admitted into St. George's Hospital under HUNTER'S care. Partly from the severity and want of success of the ordinary modes of treatment then in vogue, partly from the knowledge of the establishment of collateral circulation gained in the "cervine" experiment, and partly from investigations of the state of the arterial system generally in aneurism, HUNTER was induced to apply ligatures to the femoral artery in the sound parts at the lower part of the front of the thigh at a distance from the aneurism, and where the vessel would be tied in amputation. He ingeniously argued that if the force of the circulation were thus taken off from the aneurismal sac the progress of the disease would be stopped, and that if the parts were left to themselves, the sac, with its contents, would, in all probability, be absorbed and the whole of the tumour removed, thereby rendering the customary opening of the sac unnecessary. Such, in brief, is the historical sequence and connexion of events that have proved so full of honour to British surgery, and conferred so many benefits on suffering mankind for nearly a hundred years.

Notwithstanding all that has been said and written by learned men on the Hunterian operation, there is still a widespread misapprehension of its true nature, and of the principles upon which it is based. Not only have attempts been made from time to time and in various places to destroy HUNTER'S credit by denying his originality, but charges of wilful or unwitting plagiarism have occasionally been made. The controversy between French and English

writers respecting the rival claims of ANEL and HUNTER was at one time keen, continued, and acrimonious. Even in recent times there has been here and there slowness in according to HUNTER his proper meed of praise.

Few intelligent and candid persons would, however, now maintain that HUNTER'S operation and ANEL'S are identical, either in conception or in principle. The data for the formation of an approximately correct judgment may be found in most surgical text-books, though few writers may sufficiently set forth all the merit and originality of HUNTER'S plan. As much damage has, perhaps, been done to HUNTER'S claims by the exaggerated demands of his advocates as by the envious reprisals of his opponents. HUNTER was, for instance, not the first, as some of his apologists have alleged, to show that collateral circulation, sufficient to preserve the vitality of a limb, may be established after ligature of the main arterial trunk. At most he rediscovered the fact independently for himself, and for some of his contemporaries. The fact itself had long been known. CELSUS in the first century, GALEN in the second, AETIUS in the sixth, PAULUS ÆGINETA in the seventh, and PARÉ in the sixteenth, each and all recommended the application of the ligature to bleeding blood-vessels, whether on the exposed surface of a wound or in the continuity of a limb. As early as the year 1646 M. A. SEVERINUS and JOANNES TRULLIUS successfully tied the femoral artery for a traumatic aneurism in the thigh, and a few English and continental surgeons occasionally followed a similar practice. It is nevertheless true that HUNTER was the first to apply a ligature to the femoral artery *for spontaneous popliteal aneurism* in accordance with distinct scientific principles discovered and demonstrated by the scientific method of observation and experiment. How this method was employed and what results were attained by it for the initiation as well as the perfection of the Hunterian operation we shall endeavour to indicate on an early occasion.

IT would be amusing if it were not humiliating to read the strictures of the Commissioners in Lunacy on Lunacy Law Reform as sketched in the draft Bill submitted to Parliament by Mr. DILLWYN in the session before last. Their Thirty-fifth Report, just issued, necessarily deals with the old Bill instead of the new, and contemplates its reintroduction in the session of 1881 only as a probability. As a matter of fact, the Bill of 1881, when printed for the second reading, was a better, because more sweeping, measure than that of 1880; but the delivery of the Commission on the former Bill renders it easy to imagine the sort of criticism they would bestow on the latter. It is difficult to avoid a suspicion that the Member for Swansea must have been caught in the toils of officialism at Whitehall after the second reading of his Bill, as otherwise it is not easy to understand how he could have been induced to abandon the leading lines of reform, and to reduce the proposal he sought to carry to the miserable measure reprinted and issued after the Committee in July. Our present concern, however, is with the remarks of the Commissioners in Lunacy, and these, as we have said, would be amusing if they were not absurd.

There is no more hackneyed but unworthy mode of debating than that which consists in accusing an opponent of ignorance. It is discreditable to the common sense of those who employ it, and it contributes nothing to the refutation of an argument or to the reasonable rejection of a proposal. When, therefore (at page 120 of their Report, in criticism of the 9th clause of Mr. DILLWYN'S Bill, which provided that one of the medical signatories of a certificate in lunacy should be "the medical visitor" of the district), the Commissioners in Lunacy observe, "the framers of this Bill seem to have been unaware that in many counties there are no licensed houses, and consequently no visitors, medical or lay, and that where such visitors exist their duties are confined to the inspection of licensed houses, and that they have no power, as visitors, even to enter asylums or hospitals, much less to examine patients there," they do not simply resort to a pitiful subterfuge, but they insult the Member for Swansea by the supposition that he and those who acted with him in bringing this measure before Parliament did so without taking the trouble to make themselves acquainted with the facts. We must be excused for saying that this is both rude and silly. It is not by such a method of reasoning—if it could be dignified by that term—the "uneasy feeling," which the Commissioners confess exists, will be allayed!

The Commissioners affirm that this uneasy feeling, though "somewhat widely spread," prevails "chiefly among persons who have little special knowledge on the subject, but depend on constantly reiterated assertions that further safeguards are needed for the protection of the liberty of persons alleged to be insane." This, again, is nonsense. The Commissioners know perfectly well that those who are promoting a change in the law,—and who intend to persevere until the *vis inertiæ* of red tape has been overcome and the end is gained,—are not lacking in "special knowledge on the subject"; and they know also that nothing less than a complete measure of reform placing private asylums on a public footing, and withdrawing the power of arrest and imprisonment under a pretence of lunacy from private persons, will be satisfactory. They know that while this power exists there can be no safety; and they cannot veil the fact that the exercise of this power, as the law now stands, is *in itself* sufficient to make its victim, whether man or woman—if there be any inherited or acquired but then latent tendency to mental derangement in the case—actually insane. It is scarcely worth while to reply to the objection urged against the leading provision in Mr. DILLWYN'S Bill, more particularly as drafted and first submitted to the House of Commons in the session of 1881, that "the framers" were evidently fully aware of the existing condition of affairs, and took their own way to reach the object they had in view.

The appointment of an independent "medical visitor" in every district is a necessity of any substantial reform, and the powers of the official thus appointed must be so enlarged that he shall have the right to enter any and every asylum in his district, whether public or private, and "*to examine patients there.*" It is with an express view to the official examination of patients, and their retention under official observation, that the appointment of such a visitor, and the requirement that he shall be one of the signatories of the certificate, are urged. At present there is absolutely no official examination of patients, and no public pro-

tection for the liberty of the alleged lunatics in asylums except such as results from the humanity of the physicians and surgeons in charge of the insane. It is creditable to the vigilance of the medical practitioners engaged in asylum work that offences do not abound, seeing that the law offers not only no protection, but practically creates facilities for the multiplication of the insane—namely, by placing the power of arrest and imprisonment and a whole system of terrorism in the hands of private persons. The allegation that the lunatic has his remedy, in that he can afterwards bring an action against the individual who arrested him or wrongfully certified his insanity, is puerile, because the ordeal to which he is subjected is sufficiently severe to cause the lunacy which was at the outset perhaps falsely alleged.

So far as the Commission established at Whitehall is concerned, its services, great as they are, relate exclusively to asylums, not to their inmates. There is a deal of clerical business always on hand in that office, and the Commissioners are particular that a vast number of meaningless forms shall be filled up according to their notions of sufficiency, but they know little or nothing of the insane as individuals. They visit the asylums—as the time at their disposal may render possible—and they walk round the wards, tick off a number of names of patients on a list, and report that they "have seen every one of them." As they cannot possibly have any personal knowledge of more than a few of the oldest inhabitants of the asylum, it is easy to see what value attaches to this proceeding or the report that is thus made. The Commissioners cannot, themselves, even guard against the possibility of seeing the same patient twice under different names, in any moderately large asylum. In short, the protection afforded by the visits of the Commissioners to asylums is simply *nil;* and, as a matter of fact, they do not see *many* of the most important cases—namely, the large proportion of recent cases which die or recover within six months; that is to say, on an average of thirty years, 30·97 per cent. of those who die, and 53·33 per cent. of those who are discharged as cured. These inmates of asylums, whether public or private, for the most part come and go between the visits of the Commissioners. The services of the Commissioners are, we repeat, wholly and solely useful in relation to the asylums, and but indirectly to the insane. The only lunatics under public supervision in any personal sense are the Chancery patients, who are periodically visited by the Lord Chancellor's Visitors, and individually made the subject of examination and report. In our judgment, the officers of health located in any district are the proper persons to act as local examiners and *personal* visitors of the insane; and, as we have repeatedly pointed out, the passing of an Act nominating these public officials for the duty would be instantly followed by measures to secure their special qualification for the task. The assertion that no officer of health could see and certify all the lunatics in his district is idle, because the cases which occur in any one district are not numerous, and the officer of health is always going his rounds. We do not urge this suggestion again and again with intent to convince the Commissioners in Lunacy, but for the consideration of those who appoint Commissioners, and the public, by whose mature judgment the event as regards reform must be ultimately shaped.

In their vehement and unceasing opposition to reform, the Commissioners even asperse the Justices of the Peace generally as not possessing the qualifications requisite to give due authority to an "Order." And it is noteworthy that they urge as an objection to the making of Orders by a Justice, that his discharge of this duty would be "merely ministerial"—adopting that phrase from the Report of the Select Committee of 1877. They do not perceive that any advantage would be gained by causing the act of sending an alleged lunatic to an asylum to be performed by a disinterested and publicly responsible officer instead of by some one perhaps personally interested in putting the lunatic away. Strong in their own conscious rectitude, the Commissioners decline to suspect the motives or conduct, or even to doubt the intelligence, of anyone—except the promoters of Lunacy Law Reform and the framers of Bills to amend the Acts they desire to preserve. They are not prepared either to admit that improvement is wanting, or to concede anything to those who think and insist that a great change is urgently necessary. They do not believe that wrong is or can be done, and they will do nothing to prevent wrong-doing. With astounding assurance they assert that it is "*entirely contrary to sound principle to alter the law in an important particular without evidence of recent abuse.*" It is, therefore, of course, idle to contend that the law may be abused unless we can show that it has been abused, and that recently. On such an issue we decline to join, and we venture to think it is one which will be resented by the common sense of the community. We will not waste space and time in discussing the Report further. Enough has been said to show the spirit in which the Commissioners deal with the subject. The appeal will now be seen to lie, as it all along lay, to the Legislature and the public.

AN important addition to the observations which have been made on the minute changes in the nerve-centres in rabies has been published in the last number of VIRCHOW'S *Archiv*, by KOLESSNIKOW, Professor at the Veterinary Institution at St. Petersburg. He has examined the brain and spinal cord of twenty dogs which died with unmistakable symptoms of the disease. In most of the cases the only naked eye changes which he found in the nerve-centres were those of vascular hyperæmia, most marked in the cerebral and spinal pia mater. In some cases an œdematous state was also observed. The microscopical changes were similar in all the cases examined, the only differences being in degree. The alterations were localised in certain parts, and consisted of an infiltration of round elements such as has been described by many previous observers. The bloodvessels presented the chief morbid appearances. They were dilated and distended with blood. In some, especially the smaller veins, the lumen was occluded by white blood-corpuscles. The infiltration of the walls of the vessels with corpuscular elements, so constantly described, was found by KOLESSNIKOW in all cases, and he believes that the process sometimes begins in the adventitia and extends inwards, sometimes in the intima, and extends outwards. The nuclei of the wall of

the vessel were increased in size, and a proliferation of the endothelial cells could be clearly seen in the intima of the veins and capillaries. The connective-tissue cells in the adventitia also became proliferated and the sheath infiltrated with roundish corpuscles, which were accumulated also in the spaces between the outer coat and the muscular layer of the vessel, into which they ultimately spread, so that the whole thickness of the wall became thus ultimately infiltrated. Similar corpuscles were also found in the adjacent nerve-tissue. Hæmorrhages were found in many parts of the brain and spinal cord. Coexisting with these changes in the walls of the vessels, deposits of clear yellowish refracting substance were found between the endothelial cells, and between the adventitia and the inner coat, separating the tissue elements and narrowing the lumen of the vessel. They were often seen surrounded by the infiltrating cells. They were rarely seen within the lumen of the vessel. They were present immediately after death. They reacted to colouring agents, as albuminous substances or colloid bodies. They are believed to arise from the blood-corpuscles, on account of their occasional presence among the latter. Similar masses were found in the walls of vessels in other organs—e.g., in those of the nerves, hypoglossal, vagus, sympathetic, &c., and in the liver, kidneys, lungs, heart, and spleen.

The changes were always found to be well marked in the cerebral hemispheres, especially in the parietal and frontal lobes, but much more slightly in the occipital lobe. They were found also in the corpus striatum and optic thalamus, especially in the layers beneath the ependyma of the lateral ventricle. In two cases small extravasations were met with. Infiltration of the walls of the vessels was found in all cases in the corpora quadrigemina and pons Varolii, and with even greater intensity in the medulla oblongata. Around the nerve cells and capillaries of the hypoglossus, vagus, and spinal accessory nuclei accumulations of round cells were seen, some nearly a tenth of a millimetre in diameter. Small hæmorrhages were always found in the spinal cord. In the latter the infiltration of the walls of the vessels was almost uniformly present, and the spinal canal was usually plugged with a granular mass and surrounded by lymphoid elements. Large colloid-looking masses were present in most of the bloodvessels. The different intensity of the changes in different cases is ascribed to the degree of intensity of the poison, and especially to the duration of the disease. The changes described are for the most part the same as those met with in man by BENEDIKT, COATS, GOWERS, and others; but the observations are especially valuable from the number of cases investigated, and the demonstration which they afford of the uniformity with which these are met with in the rabid dog.

AT the annual meeting of the Faculty of Physicians and Surgeons, held on Oct. 3rd, the business was to a great extent of a purely formal and uninteresting character. The office-bearers of last year were re-elected, and the only change made in the board of examiners was the appointment of Dr. H. Miller as examiner in midwifery, in room of Dr. R. D. Tannahill. The lectures of Dr. J. Wallace Anderson on the Practice of Medicine were recognised as qualifying candidates for admission to the Faculty examinations.

Annotations.

"Ne quid nimis."

ADULTERATION OF FOOD AND DRUGS.

IN the face of a statement recently published by a lay contemporary respecting the initiation of the movement that led to the passing of the Adulteration Act, we deem it proper to record the following facts. Thirty years since, THE LANCET systematically re-entered upon a labour, first begun in the year 1831, of calling the attention of the profession, the public, and the Legislature to the subject of Adulteration. About the year 1851 Dr. Arthur Hill Hassall took up the work, and prosecuted it with vigour, applying to its detection and discovery all the resources of science, including more particularly the microscope. His researches at once attracted marked attention, and led to a conference between the late Mr. Wakley and himself, the result being the establishment of the Analytical Sanitary Commission. The first of the Reports of this Commission appeared in THE LANCET of Jan. 4th, 1851. For a long time the Reports were published each week, and afterwards fortnightly or at wider intervals, for a series of years. They not only contained the results of the examination and analysis of the different articles of food, drink, and drugs reported on, but also gave the names and addresses in full of the various merchants, traders, and others from whom the articles had been purchased, whether they were found to be genuine or adulterated. In those days they were generally the latter. The idea of publishing in all cases the names and addresses of the parties originated entirely with Mr. Wakley. It was a bold and daring step to take, and one which, we need scarcely state, involved the utmost responsibility and great pecuniary risk. In the course of the Reports the names and addresses of nearly three thousand persons were published, and thus made known to the world; and this, remarkable to say, without a successful action being sustained in any one case against THE LANCET—a convincing proof of the accuracy of the Reports. During the whole of this time Dr. Hassall was the head and prime mover in this Commission. It was he who, accompanied by his witnesses, purchased the samples, examined and analysed the vast majority of them, and wrote the whole of the Reports, subject only to the approval and revision of Mr. Wakley, who was at the cost of the Commission, and who, it should be stated, never on any one occasion intervened with a view to add to or detract from the severity of the exposures or to screen any offender. The Reports of this Commission attracted universal attention: they were not only quoted throughout the length and breadth of the land, but extracts from them found their way into all the leading foreign journals. They resulted in the disclosure of a widespread and most dangerous system of adulteration. Through their instrumentality public opinion became thoroughly aroused, and so strong a case was established that Parliamentary inquiry with a view to legislation became imperative. We are very proud of the part which this journal took in this great and important question, and although the services thus rendered to the profession and the public have been over and over again freely and publicly acknowledged, years have since passed, and with the lapse of time many things are apt to be forgotten, and this would even seem to be the case with respect to the events of which we are now writing. In the obituary notice of the late Mr. Postgate, which appeared in *The Times* of Oct. 1st, the following sentence occurs: "Indeed, it is not too much to say that it is primarily to the scientific skill and benevolent zeal of Mr. Postgate that we owe the existing laws against the adulteration of food and drugs. It was in January, 1854, that Mr. Postgate first commenced his crusade against this

evil in a letter to the late Mr. Schofield," &c. The claim thus made is one which cannot be sustained. The scientific work of the detection and exposure of adulteration, as set forth in the Reports, was commenced in THE LANCET three years before the date on which the claim of Mr. Postgate is stated to have been founded. Of the first Parliamentary Committee, which sat in 1855, to inquire into the subject of adulteration, Dr. Hassall was the chief adviser, as also the principal witness, THE LANCET Reports furnishing the basis and groundwork of the Committee's inquiries. Such, stated in as few words as possible, are the actual facts and circumstances, and it was therefore impossible for us to allow the claim advanced on behalf of Mr. Postgate to pass unnoticed. Mr. Postgate no doubt used his influence at an advanced period of the inquiry with Mr. Schofield in furtherance of useful legislation, and thus far he is entitled to credit and praise.

WOUNDS OF THE HEART.

IT is generally supposed that wounds of the heart kill immediately, and a correspondent has sent to us a stag's heart with the left auricle practically annihilated and the upper half of the left ventricle torn completely through by a bullet, so that three fingers can be readily passed through the wound into the cavity. Notwithstanding the extent of the injury, "the stag ran about sixty yards, the first ten yards up hill." The fact is that wounds of the heart are but seldom immediately fatal, if ever so. We know of no case of absolutely instantaneous death from a wound of the heart, in any part or however extensive. The experience in the battle-field corresponds with that of the sportsman, as given in the letter of our correspondent, who "never saw a deer shot through the heart that did not run some distance." Wounds of the apex kill comparatively slowly, in from one hour upwards; and in one case mentioned by John Bell, in which the apex was completely severed from the rest of the organ by a sword-cut, the man lived twelve hours. Indeed, out of twenty-nine collected cases of injury to the heart, only two were fatal within forty-eight hours, and in the others death resulted in periods varying from four to twenty-eight days. Recovery may take place even when the wound is extensive, for a bullet has been found imbedded in the substance of the heart after a lapse of six years from the date of the injury, the patient having died from a disease of another organ in no way connected with the lesion. Some little time elapses before the blood wholly escapes from or fails to enter the cavities, and the walls continue to contract and propel some of it into the vessels for a much longer period than is usually thought to be the case.

"POISONOUS" SWEETMEATS AND "POISONOUS" FOOD.

IT is curious to note that the newspapers employ the term "poisonous" to designate characteristics so different as the presence of coins in sweetmeats and the production of parasitic disease of the brain in the usual way—namely, by taking in the eggs of parasites with the food. It is a very dangerous practice to place coins or rings in cakes or sweetmeats, or food of any description, as a "surprise;" but the coin so introduced is not in any sense a poison. Again, the development of disease by the taking in of parasitic germs with food, as measly pork, is a most regrettable occurrence; but a tapeworm or a cysticercus is not a poison in the usual acceptation of the term. "Surprise bonbons" ought to be avoided; and the public should resolve to eat only meat which has been thoroughly cooked; but the interests of safety and health will not be promoted by calling things by wrong names.

THE ALLEGED INCREASE OF INSANITY.

IT appears from the Thirty-fifth Report of the Commissioners in Lunacy, that whereas on Jan. 1st, 1880, there were in all 71,191 individuals known to the Commissioners as lunatics, idiots, or persons of unsound mind, the return for Jan. 1st, 1881, gives the number as 73,113, being an increase of 1922. The Commissioners say: "We may here at once state, that the excess in the average annual increase of numbers shown by the figures of the 1st of January last, as compared with those of the 1st of January, 1880, is fully accounted for by the diminished death-rate in asylums, hospitals, and licensed houses of the year 1880, as compared with 1879." The increase is in the pauper, not in the private, class. It is significant and interesting, as bearing upon the question "Is insanity increasing?"—which has been frequently discussed in our columns and elsewhere—notably by Dr. Mortimer-Granville in the *Nineteenth Century* two years ago (March, 1879)—that the Commissioners have introduced a new tabular statement (Table III.) showing the yearly ratio of fresh admissions to population. From this it appears that the ratios per 10,000 of admissions to population in the years 1869–80 were as follows: Totals—1869, 4·71; 1870, 4·54; 1871, 4·62; 1872, 4·59; 1873, 4·80; 1874, 5·03; 1875, 5·19; 1876, 5·30; 1877, 5·28; 1878, 5·36; 1879, 5·20; 1880, 5·19. For the purposes of this table the transfers and the admissions to idiot asylums have been excluded. The Commissioners observe: "It is, we think, an established fact that the legislation of 1874 has tended to encourage the removal of pauper lunatics from workhouses into asylums, and has thus helped annually to swell the total admissions. It will, however, be observed that, notwithstanding this fact above stated, the ratio of the yearly increase of the admissions to population has been but slight and not constant, showing that the large increase in the total number of the insane under care in asylums, hospitals, and licensed houses during the twelve years to which the table refers is mainly due to *accumulation*, and *not to a greater annual product* of insanity." This official acknowledgment of the facts is welcome, and deserves to be noted, although it is made somewhat late.

HEAT DYSPNŒA.

SEVERAL physiologists have lately turned their attention to the interesting phenomenon known as "heat" or thermal dyspnœa, and a *résumé* of the results obtained is given in the last number of the *Revue Scientifique*. It is well known that when the temperature of the blood increases the respiratory rhythm becomes more frequent, dyspnœa supervenes, and those phenomena are observed which are properly attributable to exaltation of temperature. The interesting question arises, Where are the points of attack for the increased temperature? Does it act on the cerebral convolutions primarily, and through these on the respiratory centres, or does it act on the skin first, or on the pulmonary endings of the vagus first, or, finally, does it act directly on the nerve-centres which govern the respiratory movements? Goldstein believes he has proved that increased temperature does not act by way of the skin, because in a heated animal cold affusions do not at once destroy its effects; that it does not act through the cerebrum, or owing to any feeling of uneasiness on the part of the animal, because it is not prevented by morphia injected into the veins; that it does not act by the pulmonary expansion of the vagi, because it is not prevented by their section; but he endeavoured to show that it is occasioned by the direct action of heated blood on the respiratory nerve-centres by employing a method of increasing the temperature of the blood without exciting the sensory nerves at their periphery. This method consisted in exposing the carotid of a rabbit, and without otherwise

disturbing the circulation through it, surrounding it with hot water, which of course heated the blood passing to the brain and medulla oblongata. Goldstein came to the conclusion that as heat dyspnœa then set in it was clearly due to the action of the warm blood upon the respiratory nerve centres. M. Gad, with M. Mertchinsky, have made a series of experiments on rabbits in this mode, and on registering by means of a pneumograph it was found that about thirty seconds after the heating of the carotidean blood the respiratory rhythm became four or five times more frequent, and ten seconds later heat dyspnœa was fully established. The same result was obtained by another experimentor, and in an article in M. Foster's *Journal of Physiology*, contributed by M. Sihler, that observer considered that it was attributable partly to pain and partly to an increase in the amount of carbonic acid contained in the blood, and to the augmented molecular changes naturally consequent on an elevated temperature. But this conclusion is disputed by the most recent experimenters, Mertchinsky and Gad, on the ground that the type of thermic dyspnœa differs from that of asphyctic dyspnœa. In heat dyspnœa respiration is short and shallow, whilst in asphyctic dyspnœa it is deep. According to Mertchinsky moderate doses of chloral do not modify thermic dyspnœa, whilst toxic doses almost entirely prevent it from supervening, or at least cause it to appear at a much later period and in a much less marked form. The section of the two pneumogastrics was without effect. Section of the fifth pair did not prevent it from occurring, but it was much less distinctly marked. Hence he concludes that it is not a reflex action consecutive to excitation of the sensory nerves of the face by heat. Moreover, the respiratory excitement is observed in as distinct a form after ablation of the encephalon as before. Hence Mertchinsky maintains that the type and rhythm of the respiratory acts depend on the temperature of the inspiratory nerve centres situated in the medulla oblongata.

CONSULTATIONS WITH HOMŒOPATHS.

THE ill-advised utterances of leading members of the profession at Ryde, following upon the line of action pursued by another leading member in the recent case of an "illustrious invalid," have already borne bad fruit. The Lancashire and Cheshire Branch of the British Medical Association has—by a very small majority, it is true, but substantially—refused to affirm the unwritten law of the profession, that the practitioners of scientific medicine shall not meet homœopaths in consultation. This is a grave decision, and one of the first questions which it suggests, after the regrettable episodes of the general meeting at Ryde, is whether the profession is to understand that the British Medical Association, with its branches, is wholly given over to a libertine disregard of honour and consistency? The position we have all along taken in this matter, and which we are bound to maintain, is that orthodox, by which we mean scientific, practitioners of medicine *cannot* consult with those who avowedly lay aside the considerations of science in the selection of their drugs, and are guided by a rule of thumb which they call *similia similibus curantur*. It is not that we refuse to meet these men, but that it would be a farce, and therefore uncandid of us to do so, because we have nothing in common. The scientific physician does not select his drugs as a homœopath selects them; and as the selection of a plan of treatment is one of the most important purposes in every consultation held for the good of a patient, it must be obvious to every one that no man with a sense of self-respect can consent to act with a physician from whom he differs, not merely in opinion but in *principle*. If the British Medical Association is to be understood as sanctioning the contempt of moral obligation involved in the *pretende*. consultation of ordinary practitioners of medicine with the professors of a "system," it will become a question whether those members of our cloth who retain their self-respect can continue members of the Association.

MR. GOSCHEN ON MENTAL TRAINING.

IT is pleasant to find a practical man like Mr. Goschen supporting the somewhat special views of education we have long and persistently advocated. The ex-Minister draws the distinction we have so often drawn, and notably on two or three recent occasions, between marketable knowledge and knowledge which is valuable and necessary chiefly for the influence it exerts on the mind. Mr. Goschen says: "There is much knowledge to be taken to market, and avowedly taken to market, directly it is required (? acquired), but there is other knowledge, which I would rather call mental food, that passes into the mind, and should be assimilated by the mind; this should strengthen the fibre of the mind, in fact if it were not a bull, I would say knowledge that should give bone and sinew to the spiritual nature." The bull—if bull it be—is a strong one. We know that mental force is force generated by the nervous system, just as muscular force is force generated by the muscular system. Both systems must be fed, and the power of feeding or assimilation possessed by each and every part of the organism is directly proportioned to its exercise. It is, however, important to remember that the energy which creates appetite is energy that springs from within. Enforced labour is not recuperative, and self-enforced mental labour is probably worse than any other form of exhausting activity. The mind should be stimulated by a rational interest in the pursuits wherein it engages. Mr. Goschen did not lose sight of this fact when he pointed out that the knowledge "which strengthens generally the mental faculties can be acquired simultaneously with the knowledge that is directly available for the purposes of life." It is a part of personal prudence to ascertain in each individual case the precise form of knowledge likely to develop and strengthen the mind. The pains necessary to discover this fact will be well expended if the result is gained; for without such mental food and mental training as that to which Mr. Goschen alluded, there can be no stable and enduring health of mind.

MUD CABINS IN IRELAND.

IN the course of his address as president of the Social Science Congress assembled in Dublin, Lord O'Hagan gave expression to views and opinions which we do not share, but in reference to the need of sanitary reform in Ireland we are agreed. His lordship observed that "the mud cabin, with its single room and crowded foulness, is not very compatible with the formation of habits of ordered industry, and, save in a country still marvellously pure, its inmates would be subjected to many dangers." It may be at once conceded that to abolish the mud cabins of Ireland and replace them by decent cottages would be impracticable as a measure of instant sanitary reform. This "improvement" must be effected, but it will be a work of time. That is, however, no reason why the commencement of this great undertaking should be indefinitely postponed. When a noble lord brought a Bill into the Upper House of Parliament last session proposing the reconstruction of the hovels scattered over the highlands of Scotland, he was laughed to scorn. Probably a like reception would be awarded to a measure destined to amend the condition of the mud cabins of Ireland. Nevertheless it is the fact, as Lord O'Hagan affirms, that the existence of these miserable habitations is one—and by no means the least efficient—cause of the backward condition of the peasantry so far as

"ordered industry" is concerned. It is simply impossible that the people of Ireland can be contented, healthy, or energetic, while they live with their pigs, feed on potatoes, and are bred in cabins, in which the race of Bosjesmen would scarcely deign to exist.

THE CHAIR OF PATHOLOGICAL ANATOMY AT VIENNA.

FOR some weeks past rumour has been busy concerning the vacant professorship of Pathological Anatomy at Vienna, so long held by Rokitansky, whose immediate successor, Heschl, enjoyed but a brief tenure of office at the close of his life. Amongst the names which have been most freely spoken of, those of Professor Cohnheim of Leipzig and Professor Klebs of Prague have been foremost, and the final selection will probably fall on one or other of these distinguished scientists. The name of Cohnheim is associated with observations on the processes of inflammation and embolism which have done much to advance our knowledge of general pathology, a department in which he has specially worked. Professor Klebs is the author of an extended treatise on pathological anatomy, and his communication to the section of Pathology at the Congress upon the relations of minute organisms to certain specific diseases must be fresh in the memory of our readers. Either of these men would worthily hold the Vienna chair, around which so much fame has gathered. It is, however, to be regretted that the appointment is being made the occasion of a polemical controversy upon the relative merits of these two well-known men, and a partisan spirit has been created, which is somewhat out of place in respect to an office of such high importance.

THE MEDICAL SOCIETIES.

THE various metropolitan medical societies reassemble this month after the vacation, the first to do so being the Obstetrical, which met on Wednesday last, the 5th inst., when a paper was read by Dr. Herman upon the Relation of Anteflexion of the Uterus to Dysmenorrhœa. The Ophthalmological Society meets on Thursday, the 13th; the Clinical on Friday, the 14th; the Medical on Monday, the 17th; the Pathological on Tuesday, the 18th; and the Royal Medical and Chirurgical on Tuesday, the 25th. We may hope that the forthcoming session will be fruitful of much good and sound scientific work at these Societies, and already there are promises of considerable activity in them.

ENFORCED CELIBACY.

IT seems that in certain districts of this land of liberty the guardians of public order must be unmarried. That is a remarkable regulation—as some may think, remarkably short-sighted on the part of those who conceived the rule and those by whom it is maintained. Enforced celibacy in any rank or condition of life is a social blunder. It may be well for the individual or the class, but it is of evil example and influence in society, and ought to be interdicted. We know the inevitable results of restriction imposed on marriage in the army; the State recognises the mischief-working consequences of this regulation with one eye, while the other is closed to the facts. So it is with celibacy and its contingent results everywhere, whether in the Church or the world. The community *knows* the rule is detrimental to the best interests of social life, although, in some circles at least, there is a strange lack of courage to avow it. Voluntary abstinence from marriage is one thing, and rests with the individual; it is seldom a wise policy, but with that consideration society has no right to concern itself. For the enforcement of celibacy in any class of public servants the community is responsible; and if there is a want of average common sense on the part of our local authorities, public opinion must interpose to supply the deficiency, and, let us add, to relieve those by whom it is manifested of duties they are unfitted to discharge.

LORD DERBY ON THE PROFESSION OF MEDICINE.

LORD DERBY presided at the opening of the winter session of the Liverpool Royal Infirmary School of Medicine, on Monday last, and after distributing the prizes made some cordial remarks on the privileges and responsibilities of the practice of medicine. He showed himself keenly alive to the political importance of the profession when he dwelt upon the fact that there is a struggle of races as of individuals, that the strongest must win in the end, and that physical health is one of the primary elements in that "strength." Sanitary science, by extending the span of life and lessening disease, has done and will do very much to increase the survivorship of the "fittest" in the truest sense. We gladly quote the following sentences, for they admirably portray some of the practitioner's difficulties and anxieties, whilst they describe the requisites demanded.

"I need not point out, in connexion with that subject, how great is the power and influence of the medical adviser on distress; nor need I dwell on what is obvious enough—the demand made upon him for courage and honesty to speak the whole truth where scientific matters are in question, where money is on one side and health on the other, and when plain speech may give serious offence in quarters where offence is dangerous. He has to deal, not with dead matter, but with men and women; he has to witness and experience their caprices, their passions, their weaknesses, and of these last at least he sees more than the members of any other profession—and that is no light burden to bear. He must be firm, under penalty of being useless. He must be sympathetic, or the experience of his daily life will force him into cynicism. He must avoid needless pugnacity and antagonism, yet without yielding in any essential point to the quackery and empiricism in which a half-educated public delights. But, on the other hand, he probably enjoys more of the confidence of those with whom he has to do than any other adviser. We do not in these days confess ourselves to priests, but we do confess ourselves—generally with great sincerity—to our lawyers and our physicians. For the great office, as I most seriously call it, of a trusted medical adviser there is wanting more than fine science, though that must necessarily be the basis: he must have tact, judgment, firmness in opinion, courtesy, and gentleness in expression. One thing more I will add. There is happily in all departments of life much unpaid service freely and ungrudgingly rendered, often by men who might be excused if they thought first of their own scantily-provided families. But I assert with some confidence that the absolutely gratuitous assistance given by the medical profession to those who are unable to pay for it far exceeds that which is bestowed or demanded in any other line of life; and it is not less creditable to those who give it because custom has in great measure caused it to be expected as a matter of course. Whether it is equally creditable to the public that it should be expected to the extent it is, is a different question, into which I need not now enter."

THE PRELIMINARY EXAMINATION OF THE ROYAL COLLEGE OF SURGEONS.

THE College of Surgeons of England has held its last preliminary examination, and the list of successful candidates has been published in the daily papers. Most of these young gentlemen have probably ere this enrolled themselves as medical students. There are loud complaints among them that the result of the examination was not made known to them earlier. The examiners returned their list to the College authorities some time ago, and yet we hear of candidates who did not receive the official intimation until Thursday, Sept. 29th. It is obvious that in all cases this was a most serious inconvenience, as it left but a very short time before the commencement of the medical session. But

in some cases it actually prevented students from competing at the examination for the entrance scholarship of their hospital. It is difficult to account for this thoughtless delay on the part of the College officials; it, perhaps, affords a final proof of their incapacity to manage the preliminary examination, which has now, happily, been held for the last time.

THE ROYAL MEDICAL COLLEGE.

WE have much pleasure in announcing that Charles Herbert Duncan, the son of Dr. Duncan of Great Marlborough-street, who has been a pupil at the Epsom Royal Medical College for four years, is entitled by his place in the recent matriculation at the University of London to a free medical education at Charing-cross Hospital, and to the Wakley Exhibition in the Epsom College, which will cover the cost of his preparing for the Preliminary Scientific Examination for the degree of M.B.

CHARING-CROSS HOSPITAL.

THESE new buildings, now perfectly complete for the reception of students, were opened on Monday last with a well-attended conversazione, comprising the usual exhibits on such occasions. The various lecture-rooms and theatres were most artistically decorated, and pictures lent by various members of the staff and the Messrs. Graves, of Pall-mall, had a very pleasing effect. An excellent amateur quartet band, led by Dr. Woolfenden, entertained the company at intervals in the large theatre. An old students' dinner was held at the Langham Hotel in the evening, which was honoured by the presence of Sir William Jenner, Lord Tenterden, R. Few, Esq., and other friends of the hospital. Later on a ball was given in the large room destined for the museum, which was kept up with great spirit until a late hour.

GUY'S HOSPITAL.

THE Medical Session was opened at Guy's Hospital on Monday by a conversazione. The grounds were prettily illuminated, and the reception-room was rich with objects of scientific and artistic interest. Mr. Gibbs, the President of the Hospital, distributed the prizes gained by the students during the past year. Dr. Wilks and Mr. Bryant, in proposing and seconding a vote of thanks to the President, took occasion to assert that in the recent troubles at the Hospital the efficiency of the Medical School was in no way imperilled, and that the privileges of the students in the wards had not been curtailed.

WESTMINSTER HOSPITAL.

THE annual dinner of the Westminster Hospital Medical School was held on Monday last, at the Langham Hotel. Nearly seventy assembled, including many "old students," and a good number of those attending the various classes. Mr. Richard Davy occupied the chair.

ARMY MEDICAL SCHOOL.

THE forty-third session of the Army Medical School was opened at Netley on Monday, the 3rd instant, by an introductory address from Professor F. de Chaumont, F.R.S. The class for the winter is formed of twenty-four surgeons on probation for the Army Medical Service, and ten surgeons on probation for the Indian Medical Service, all of whom were successful in the competition for appointments in August last. The competition on that occasion was on a larger scale than it had been for many years previously. Colonial Surgeon Dr. Rowland, from Lagos, on the Gold Coast, has also joined for the purpose of following the course of practical instruction at the school.

THE dangers to which attendants on lunatics are constantly exposed were again illustrated by a fatal assault which took place last week at Merryflatts Asylum, belonging to the Govan Parochial Board. It appears that on Tuesday evening a gang of twenty lunatic work men were returning from work under the charge of two attendants. One of the lunatics was pushing a barrow in which was a spade, and while on the way home he laid it down. An attendant named Angus, aged twenty-five, asked him quietly to take it up again; but the man suddenly lifted the spade, and struck a blow at the attendant, fracturing his skull. The depressed fragments of bone were raised, but the young man died, after lingering a few days. The lunatic was at once put under restraint, and has already been up for examination before Sheriff Balfour.

A CASE of accidental poisoning by carbolic acid formed the subject of a coroner's inquiry at Chelsea Workhouse on the 29th ult. The evidence adduced would seem to show that there is among the humbler classes a want of knowledge of the dangerous nature of the drug. The husband of the deceased, who was in great suffering all night from the effects of the poison, alleged as his excuse for not obtaining medical assistance that "he did not think it was so serious as it was."

THE Gresham Lectures on Medicine will be delivered by Dr. Symes Thompson at the Gresham College, Basinghall-street, on the 11th, 12th, 13th, and 14th inst. The subject for the present series is the Nervous System, which will be treated of under four headings: Mind and Matter; Involuntary and Reflex Nervous Action; Nerves of Special Sense; Results of Defective Nerve Action. The lectures commence at six P.M. each evening.

DR. WM. THOMPSON, late of Inistioge, county Kilkenny, was taken suddenly ill in Sackville-street, Dublin, last Monday, and on being removed to Jervis-street Hospital, it was found that life was extinct.

THE name of Sir James Paget, Bart., is announced as that of the Conservative students' candidate for the office of Lord Rector of the University of Aberdeen.

WE regret to learn that Dr. Hayden, a member of the Senate of the Royal University of Ireland, is at present suffering from an attack of congestion of the lungs.

PROF. MORRISON WATSON, of the Owens College, Manchester, is a candidate for the chair of Human and Comparative Anatomy at the University of Oxford.

DR. MCCLINTOCK of Dublin, who has been seriously indisposed, is progressing most favourably.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.—At the annual meeting of this Society, held on September 29th, the President, Dr. Eastwood, in the chair, the officers of the Society were re-elected as follows:—President: Dr. J. W. Eastwood. Vice-presidents: Drs. Luke Armstrong, J. Frain, B. Barkus, and G. H. Hume. Secretary: Dr. Drummond. Committee: Mr. H. E. Armstrong, Dr. Arnison, Mr. S. W. Broadbent, Dr. T. W. Barron, Dr. J. S. Denham, Mr. G. B. Morgan, Dr. Murphy, Mr. Page, and Dr. Philipson.

A NEW cottage hospital has been opened at Ballymena. The institution is capable of receiving seven in-patients.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Maldon, Rural (Essex).—The last published report (the tenth) of the Local Government Board contains, among the examples of approved annual reports of medical officers of health, one by Dr. Downes on the sanitary condition of the Maldon rural sanitary district. This is the first report of this medical officer of health that has come under our observation. We learn that it is not the practice of the districts for which Dr. Downes acts as medical officer of health to print his reports. Judging from the present report, given to us by the Local Government Board, the local sanitary authorities in pursuing this course do a great wrong to the populations of their districts, practically withdrawing from them the information best calculated to instruct the inhabitants in what is requisite for their sanitary welfare. The course, moreover, inflicts scarcely less loss on outsiders, for it is obvious that Dr. Downes's reports, from this specimen, must take a foremost place among this class of documents, and that they would prove of great value to medical officers of health and sanitary workers in general. Dr. Downes's report on Maldon follows strictly the arrangement for annual reports suggested by the Local Government Board. It is an admirable illustration of the value of these suggestions, and shows how aptly they lend themselves to and facilitate a medical officer of health setting forth his annual proceedings and the sanitary condition of the districts under his supervision. In this respect alone Dr. Downes's report would deserve consideration; but it throughout affords striking evidence that he is the right man in the right place—that he is of that quality of medical officer of health that once secured, both the central and local authorities should neglect no opportunity of fixing firmly to the post. The excellence of this report is so incorporated in it from beginning to end that it is difficult, in the absence of any prominent subject occurring in the year to which the document refers, to make extracts from it; but it is not without interest to observe that Dr. Downes expresses the opinion, as regards his district, that nearly "every outbreak of contagious zymotic disease might be prevented from extending, and be stamped out, if the following steps could be effectually adopted: 1. Immediate notification of the disease to the medical officer of health. 2. Proper isolation. 3. Precise disinfection." The following suggestive observations also deserve quotation:—"It does not necessarily follow that waters which are rejected by the analyst are equally dangerous to health. Chemical analysis cannot show the elements that produce or disseminate disease, but merely the presence of certain matters which are occasionally found to accompany those elements. The chemist can tell you whether or no animal refuse finds its way into a water, and also whether that refuse is present in its original filthy state, or whether it has been filtered and oxidised into saline matter, harmless in itself, but objectionable on account of its origin and possible association at another time with unchanged filth. But the actual degree of danger can only be accurately estimated when, analysis in hand, we examine the surroundings of the well and judge from what source the organic matter finds its entrance. The most dangerous condition of contamination is where the water is tainted by the products of human excrement, but I wish to point out how erroneous is the popular idea that such water usually produces fever or defined serious illness; such a consequence is the exception. I believe from my experience that water of this class may cause autumnal or summer diarrhœa (and possibly may lower the tone of constitution and occasion, in a few, various chronic diseases), but the really dangerous feature is that the germ of enteric fever or cholera may at any time find an entrance to the well. This in fact may be compared to a powder magazine; a man may live to a good old age there, but all depends upon the chance entrance of a spark and how many people happen to be within reach." Let us hope that the sanitary authorities of the districts to which Dr. Downes acts as medical officer of health will reverse their policy of relegating his reports to a pigeon-hole in their clerk's office, but will henceforth give them to the world, to the benefit alike of their constituents and sanitary workers in general.

Hackney (Metropolis).—Dr. Tripe's report for 1880 is of peculiar interest. It is chiefly occupied with an elaborate account of the recent and still unended epidemic of small-pox, with small-pox as it has occurred in the metropolis during the last decennium, and as the disease has affected the district of which he is medical officer of health. It deals also with the question of the influence exercised by the great small-pox hospital of the Metropolitan Asylums Board in his district, at Homerton, upon the prevalence of the disease among the population living in its immediate and near vicinity. Dr. Tripe gives, in relation to the prevalence of small-pox in London, much important statistical evidence, showing the declension of fatal small-pox before and since the introduction of vaccination, and in recent years; and, as regards Hackney, he shows how seriously the incidence of fatal small-pox has been disturbed in that district since the establishment of the hospital there. The deaths from small-pox in London during the decennium 1861–70 were at the rate of 28 per 100,000 inhabitants; in Hackney during the same decennium 17; but during the decennium 1871–80 the rate of mortality from small-pox in London was 46 per 100,000 inhabitants; in Hackney 64. He enters into a detailed statistical examination of his reasons for assuming that the greater incidence of fatal small-pox in Hackney in the decennium 1871–80 was due to the erection of the Metropolitan Asylums Board Hospital there, and he further proceeds to show by a careful examination of the distribution of small-pox deaths in Hackney in relation to the hospital that the greater mortality was found in the streets immediately adjacent to the hospital, the rate of mortality diminishing in the streets removed further away from it. The figures and details on which he bases this conclusion deserve the most attentive consideration. The case against the hospital, as Dr. Tripe puts it, seems painfully clear; but as to the question of the harmfulness of small-pox hospitals in general to near populations he has some observations which demand attention. Dr. Tripe attributes the mischievous effects of the Homerton Small-pox Hospital upon the population of the houses immediately adjoining it to remediable defects in administration, leading to certain possibilities of communication of contagion from the sick within the wards to persons living outside the precincts of the hospital, and to the too great contiguity to the hospital wards to not a few of the neighbouring houses—a contiguity such as, he thinks, to warrant the assumption of a certain diffusion to them of the contagion of small-pox from the open windows of the wards and from the laundry. It would appear, moreover, that on one side of the hospital, and within ninety feet distance from small-pox wards, is a large workhouse infirmary, and that at no time since the occupation of the wards by patients has small-pox occurred among the patients treated in the infirmary. Dr. Tripe quotes also the instances of the small-pox hospital at Highgate (108 beds), and of two temporary small-pox hospitals which at no time contained within them more than thirty-five patients, as examples of small-pox hospitals in regard to which it was never suspected that they exercised any injurious effects upon the populations in their vicinity. He is clearly of opinion, indeed, that the size of a small-pox hospital, in reference to bed accommodation, has to do with certain of the mischievous phenomena observed in connexion with the Homerton Hospital, and that the smaller the hospital the less likely are phenomena of this class to occur. Even with regard to hospitals of the Homerton class he expresses the opinion, that if the wards and outbuildings "were surrounded by a belt of land of at least one hundred feet, there would not be much probability of persons outside becoming infected through the air." Dr. Tripe's report recalls to mind that when his conclusions as to mischief created among the population residing near to the hospital were first made known, an official inquiry into the question was directed to be made by the Local Government Board, Dr. Bridges being instructed to make the inquiry. Several months have passed since this investigation was made, but no report of its results has been given to the public. It is not easy to understand why a report on a matter of such public moment should be reserved, particularly if its contents were of a nature to reassure the public.

THE INCIDENCE OF THE SMALL-POX EPIDEMIC.

A return has been presented of the numbers of small-pox patients sent into the Metropolitan Asylums Board's small-pox hospitals by each district of the metropolis for the first two quarters of the year. In the first quarter the City of London Union sent 50, and in the second 23. The Fulham district sent 102 in the first quarter, and 132 in the second; Greenwich sent 268 and 469; Hackney sent 530 and 308; Holborn Union of parishes, 123 and 190; Lewisham, 41 and 24; Mile-end Hamlet, 97 and 98; the Poplar Union of parishes, 66 and 49; St. George's, Hanover-square, Union of parishes, 66 and 49; St. George's-in-the-East parish, 107 and 52; St. Giles's, Bloomsbury Union of parishes, 14 and 31; St. Giles's, Camberwell parish, 285 and 245; St. John's, Hampstead, 3 and 12; Shoreditch parish, 196 and 451; Chelsea, 64 and 66; Paddington parish, 20 and 41; St. Marylebone, 34 and 102; Lambeth parish, 254 and 202; Islington parish, 169 and 217; Kensington parish, 100 and 133; Bethnal-green parish, 355 and 208; St. Pancras parish, 72 and 85; St. Olave's Union of parishes, 111 and 174; St. Saviour's, Southwark parish, 190 and 190; the Strand Union, 14 and 30; Stepney Union of parishes, 122 and 47; Wandsworth and Clapham Union of parishes, 143 and 138; Whitechapel parish, 125 and 53; Woolwich, 49 and 53; Westminster Union of parishes, 12 and 17; and the Port of London, two in the first quarter, only. In the total 3794 patients were received in the first quarter, and 3983 in the second.

SMALL-POX HOSPITALS.

At a meeting of the Metropolitan Asylums Board, on the 1st inst., an important letter was read from the Local Government Board, in reference to the proceedings taken by residents of Fulham and its vicinity to prevent the small-pox hospital in that locality from being used for patients of the metropolis generally in conjunction with other small-pox hospitals. The Board objected to the wish of the inhabitants of Fulham to restrict the accommodation of the hospital to cases arising within the district on the ground that the adoption of a like principle in other parts of the metropolis would practically have the effect of leaving large areas wholly without accommodation for fever and small-pox patients, to the manifest danger of the public generally. With regard to the interim injunction obtained against the general use for the metropolis of the Fulham Hospital, the Local Government Board felt unable to advise the managers in regard to a proposed appeal against the continuance of the injunction, and after an expression of inability to understand upon what principle the complaint could be supported against the use of the hospital for patients coming from outside a mile radius, while it was to be left free for the use of those within that circuit, the Local Government Board advised reference to counsel's opinion on some of the points raised.

PROPOSED ASSOCIATION OF LOCAL BOARDS.

A meeting of representatives of various local boards in the neighbourhood of Manchester, convened by Mr. W. J. Hewetson, clerk to the Swinton and Pendlebury Local Board, was held last week, "for the purpose of discussing the question of the formation of a Local Board Association." The objects of the proposed association were to meet at such times and places as might be required, consider all matters affecting local government, particularly any Bill or Bills that might be brought before Parliament, and to give, if necessary, information on any question which might have been considered and acted upon by any particular board. A resolution was unanimously passed, declaring that it was desirable to form an association of local authorities for an area to be hereafter decided upon, and a committee was appointed to arrange the necessary details.

At the Henley Police Court on the 29th ult. the Thames Conservators summoned the rural sanitary authority for polluting the Thames by allowing the drainage of Caversham to enter the river. The case excited much interest, and the defence set up was that the authority had done their utmost to prevent the pollution. Mr. Wigner, the analyst to the Conservators, proved that the sample of water taken at the drain was little else than concentrated sewage, and caused by old sewage matter being allowed to run into the river. Ultimately the Bench inflicted a penalty of 40s. Notice of appeal was given.

Mr. Harrison, C.E., one of the inspectors for the Local Government Board, held an inquiry at the Birmingham Council House on the 23rd ult., with reference to the application of the Town Council for sanction to borrow £127,000 for works of sewerage and street improvements, public baths, and market and fire brigade purposes. There was no opposition.

The Barton-upon-Irwell Rural Sanitary Authority are taking steps towards the erection of an infectious diseases hospital for the districts of Worsley and Clifton.

The day and Sunday schools of Roydon have been closed in consequence of the prevalence of scarlet fever in the district.

Owing to the unwonted prevalence of "fever" in Normanton a house-to-house visitation has been instituted.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

The rate of mortality in our large towns has been considerably below the average during the unseasonably low temperature of the past five weeks. During the week ending last Saturday 5223 births and 2667 deaths were registered in twenty of the largest English towns. The annual death-rate in these towns, which had been equal to 17·3 and 18·2 per 1000 in the two preceding weeks, declined again to 17·9 last week. The lowest rates in these towns last week were 13·2 in Plymouth, 15·4 in Newcastle-upon-Tyne, and 15·9 in Sheffield, Portsmouth, and Brighton; the rates in the other towns ranged upwards to 21·8 in Bradford, 22·5 in Manchester, 22·7 in Liverpool, and 24·2 in Hull. The deaths referred to the principal zymotic diseases in the twenty towns were 454, showing an increase of 27 upon those of the previous week; they included 130 from scarlet fever, 106 from diarrhœa, 81 from fever (principally enteric), 60 from whooping-cough, 43 from measles, 18 from diphtheria, and 16 from small-pox. No deaths from any of these diseases were recorded either in Brighton or Plymouth, whereas they caused the highest death-rates in Bradford and Hull. The largest proportional fatality from scarlet fever occurred in Hull, Bradford, and Nottingham; no fewer than 225 fatal cases of this disease were recorded in Hull during the thirteen weeks ending last Saturday, including 28 last week. Of the 18 deaths from diphtheria, 12 occurred in London and 2 in Portsmouth. Fever, principally enteric, showed the highest death-rate in Leicester, Newcastle-upon-Tyne, and Leeds. Small-pox caused 16 more deaths in London and its suburban districts and one in Leeds. The number of small-pox patients in the metropolitan asylum hospitals, which had been 582, 528, and 476, on the three previous Saturdays, had further declined to 454 at the end of last week; these included 90 in the *Atlas* hospital ship, and 28 in the Convalescent Camp Hospital at Darenth. The new cases of small-pox admitted to these hospitals declined again to 70 last week, against 68 and 84 in the two previous weeks. The deaths referred to the diseases of the respiratory organs in London, which had steadily increased in the four preceding weeks from 115 to 164, further rose to 186 last week, which were, however, 12 below the corrected average weekly number. The causes of 67, or 2·6 per cent., of the deaths in the twenty towns last week were not certified either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths, which did not exceed 0·9 per cent. in London, averaged 4·0 per cent. in the nineteen provincial towns. All the causes of death were duly certified in Birmingham, Portsmouth, Norwich, and Plymouth, while the proportion of uncertified deaths was largest in Bristol, Leicester, Salford, Hull, and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in eight of the largest Scotch towns, which had been equal to 18·0 and 18·2 in the two preceding weeks, declined to 17·4 last week, and was 0·5 below the average rate that prevailed in the twenty large English towns. The rates in the Scotch towns ranged from 10·8 and 15·8 in Aberdeen and Paisley, to 20·3 and 26·1 in Greenock and Perth. The deaths referred to the principal zymotic diseases were 86 last week, and showed a further slight increase upon

the low numbers in recent weeks; 39 resulted from diarrhœa, 18 from diphtheria, 12 from scarlet fever, 9 from "fever," 7 from whooping-cough, 1 from measles, and not one from small-pox. The annual death-rate from these zymotic diseases averaged 3·7 per 1000 in the eight towns, and exceeded by 0·6 the average rate from the same diseases in the twenty English towns. The 39 fatal cases of diarrhœa showed an increase of 12 upon those returned in the previous week, and included 16 in Glasgow. The 18 deaths from diphtheria exceeded those returned in the previous week by 6, 8 occurring in Glasgow, 3 in Dundee, and 3 in Leith. The 12 deaths from scarlet fever were 2 less than those in the previous week, and included 5 in Edinburgh, 3 in Glasgow, and 2 in Dundee. The 9 deaths attributed to "fever" (typhus, enteric, or simple) showed a decline of 4 from those in the previous week; 6 were returned in Glasgow and 2 in Dundee. The deaths referred to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy), which had been 79 and 78 in the two previous weeks, rose to 83 last week, and were equal to an annual rate of 3·6 per 1000, which considerably exceeded the rate that prevailed from the same causes in London.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had steadily increased from 16·6 to 22·8 in the four preceding weeks, declined again to 17·8 last week. During the thirteen weeks ending last Saturday the death-rate in the city averaged 20·0, against 20·5 in London and 17·0 in Edinburgh. The 119 deaths in the city showed a decline of 34 from those returned in the previous week; they included 14 which were referred to the principal zymotic diseases, of which 5 resulted from fever (typhus, enteric, or simple), 5 from diarrhœa, 3 from scarlet fever, and 1 from measles. The annual death-rate from these zymotic diseases did not exceed 2·1 per 1000, while the rate from the same causes was equal to 2·9 in London and 3·4 in Edinburgh. The deaths referred to "fever," which had been 3 and 4 in the two preceding weeks, further rose to 5 last week. The deaths from fever in Dublin, which had been 145 and 90 in the two first quarters of the year, declined to 79 in the thirteen weeks ending last Saturday; these were, however, equal to an annual rate three times as great as that which prevailed during the same period in the twenty large English towns. The fatal cases both of diarrhœa and of scarlet fever last week exceeded the numbers returned in the previous week. The deaths both of infants and of elderly persons scarcely differed from the numbers in the previous week, while those of children and adults aged 1 and under 60 years, showed a marked decline.

SMALL-POX FATALITY IN LARGE ENGLISH TOWNS.

In the quarter just ended, 487 deaths from small-pox were registered in the twenty large English towns embraced by the Registrar-General's weekly return, and having an estimated population of nearly eight millions of persons. Of these no less than 461 occurred in London, while only 26 were recorded in the nineteen provincial towns, having an aggregate population very nearly equal to that of the metropolis. The latter number included 12 in Liverpool, 4 in Brighton, 3 in Oldham, 2 in Leeds, 2 in Hull, 2 in Newcastle-upon-Tyne, and 1 in Bradford; while no fatal case was registered in any of the twelve other towns. In most of these cases it was especially noted that the disease was imported from the metropolis.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

The movement for converting unused burial-grounds in and around London into places of public recreation seems to be making satisfactory progress. The arrangements necessary for the conversion of St. Margaret's churchyard, adjoining Westminster Abbey, into a garden, for which a faculty has already been obtained, have been completed. It is stated that the inhabitants of the district of Tottenham-court-road intend to petition the trustees of the place of worship known as Whitefield's Tabernacle, with a view to laying out the adjacent ground as a garden for the use of the public. The plot of land known as St. John's burial-ground, in Horseferry-road, Westminster, will, it is understood, be brought under the notice of the Court of Arches, in order that it may be converted into a recreation ground for the inhabitants.

The yellow fever epidemic at Bridgetown appears to have awakened the authorities to a sense of the necessity of raising the sanitary condition of the town, which is acknowledged to be decidedly inferior; whilst the organisation existing to cope with unhealthy influences flowing from bad hygienic arrangements, and gradually to obtain their removal, is understood to be quite open to improvement.

Advices from Aden up to the 1st inst. confirm the later reports as to the gradual subsidence of cholera in the city. Vessels are allowed to pass through the Suez Canal, providing they have neither pilgrims nor suspected cases of cholera on board. The daily number of deaths from the disease at Mecca appears to be diminishing.

The scarlet fever which prevails extensively at Merthyr has, we regret to learn, brought mourning into the household of Mr. Ward, medical officer of the workhouse and infirmary, who has lost a daughter by the disease.

The Lancet Commission
ON THE
FOOD-SUPPLY OF LONDON.

No. I.

FOREIGN observers of London life have often insisted that if we have lived so long without revolutionary outbreaks, this immunity was due to the cheapness of fish. With fresh herrings at three a penny, and four huge mackerel for a shilling, there was but little danger of revolution with starvation as its motive power. Unfortunately the safety-valve represented by cheap fish has of late years become so embarrassed and clogged that its efficiency is seriously menaced. For our part, and putting the question of revolution entirely aside, we cannot but consider the matter of grave importance as affecting public health. All who are acquainted with the habits of the poorest sections of the community are fully aware that cheap fish has saved hundreds and thousands of people from the physical and moral consequences of insufficient food. It therefore behoves those who are interested in the maintenance of public health to resist all influences tending to increase the price of this essential article of economic diet, and we have consequently instituted a series of inquiries as to the easy distribution of inexpensive food among the masses. Naturally the condition of the Billingsgate Fish Market came first under consideration, for it is admitted on all sides that there is here a serious grievance. Though on this subject the most contradictory opinions are expressed, everyone is at least agreed that the approaches to the market are altogether inadequate. The market itself is condemned by the majority as not large enough for the salesmen, and by all as too small to allow the carts and waggons to "lie by."

For want of proper accommodation large arrivals of fish cannot be disposed of at once. The better fish then obtains the preference, while such fish as haddocks, plaice, &c., known technically as "offal" and practically constituting a staple article of food for the poorer classes, is temporarily put aside, where it soon acquires that staleness which may perhaps render it cheap, but certainly makes it nasty. Watching for such opportunities, there is a large body of men, of the costermonger class, who readily buy stale haddocks, which they take home to salt and smoke. These are hung up all day to dry in the filthiest dens of the East-end. We have seen back yards with hundreds of these haddocks suspended like linen from strings, and dangling not merely in the yard, but, space being scarce, over the dust heaps and in the waterclosets. It is very questionable whether these haddocks, when they are bought, are not often something more than merely stale. The salting and smoking would kill the maggots, but the moist fish, suspended for several hours over open and filthy closets and drains might well absorb and store germs of disease ready for the breakfast-table.

The fresh haddocks generally arrive at the market at five in the morning, but are put aside for want of room while the better fish is selling. Nor are the London haddock-smokers

ready to buy at this early hour. They come to the market with their supply of the previous day all smoked; and it is not till they have sold these that they have sufficient capital to buy the fresh fish. Thus the haddocks are rarely put up to auction before eight o'clock, though they arrive at five. As this common fish is not generally kept in ice, and its confiscation when unfit for food depends on a somewhat inferior class of inspectors, the result is dubious.

A larger market would not only prevent the deterioration of fish by giving room for its prompt sale, but would render it more difficult to keep fish waiting outside till the prices were favourable. At the same time, a glut is not an unmixed advantage. About three weeks ago, the weather being sultry, many thousand packages of haddocks had to be sold suddenly; any attempt to keep them back would have resulted in the loss of the entire stock. They sold at one to two shillings per package; each package containing from four to six dozen fish. The carriage alone amounted to more than the price realised for the fish. That same evening in the street markets the costermongers were selling five to six haddocks for "twopence the lot!" This was a great opportunity for the poor of London; but, on the other hand, the brave fishermen got nothing for their trouble, and were fortunate if they escaped without having to pay something towards the carriage of this fish to London. Such fluctuations, by disheartening the fishermen, tend to reduce the supply, and would not occur so easily if the market were much larger and more readily accessible. Even under ordinary circumstances, we are assured, they only get three halfpence per pound for what they catch, out of which they must pay five per cent. commission to the salesmen, and expenses. For this same fish the retail consumer pays sixpence and sevenpence the pound, thus something like eighty per cent. of the price actually paid by the public goes to enrich intermediaries. Still there are numbers of salesmen who strenuously deny the existence of a ring, and argue that it would be impossible to sell the fish cheaper. We maintain, however, that the fish could be retailed at a cheaper rate, and this without reducing the share of the profits received by the catchers. Indeed, it is an essential phase of the question that these latter should be more liberally dealt with. How far this is prevented by the action of middlemen, or of a ring, if it exists, we purpose to explain on a future occasion. In the meanwhile, we may with confidence urge that any occult influence could not be so easily maintained, or established, if the market were not circumscribed to the very narrow limits of Billingsgate as it now stands.

If a large fish market were created we should very probably see on the same site, but at a different hour, a semi-retail and a retail market. At the latter not only could fish be obtained at a cheaper price than is generally given for it, but it would act on all the fishmongers throughout the poorer districts. This, at least, is what has occurred at the central meat market. Many thousand persons now buy their meat at the market, and the local butchers, in poor quarters, are obliged to reduce their prices when their customers threaten to go to Smithfield. But there is no similar market for the retail sale of fish, and the public is, therefore, at the mercy of the tradesmen and the costermongers. Practically speaking, the retail price of meat is the same all the year round, whether the supply be scarce or plentiful; but the people who go to the central market on Saturday night do profit a little by the fluctuations, and if the market were still more frequented the tradesmen would be compelled to make a difference when wholesale prices were low. These considerations suffice to make us the advocates of an enlarged fish market; for we believe that this would in many ways tend towards the object we have in view—cheap food for the people, sold in good condition, and free from all taint that may convey disease.

When the wholesale market at Billingsgate comes to be either enlarged or removed to a more suitable position care must be taken to create at the same time a retail market which shall not reproduce the errors committed at Smithfield. The beneficent action of the Smithfield retail market held every Saturday afternoon would have a wider influence on the meat supply of many homes but for the errors of management, which should serve as a useful warning. At Smithfield the wholesale dealers simply lend their stalls to their assistants, and sell them some of the remains that they were not able to dispose of during the hours of wholesale business. If any very good meat remains this is carefully stored away, and kept for the wholesale market of the ensuing Monday. Hence it is impossible to obtain a prime piece of meat at the retail market, unless as a very special favour. A great quantity of what is termed "serviceable" meat, thoroughly sound and good, but of second- or third-rate quality, is sold at very reasonable prices. Thus might be seen on last Saturday some fairly good beef at 8*d.* per pound, a vast choice of necks of mutton at 6*d.* to 7*d.*, and even some West country necks of mutton at 6½*d.* per pound. One enterprising salesman offered a good young leg of mutton and the neck, both together, for 8*d.* the pound. But, by the side of these very fair bargains, there was an immense quantity of very inferior meat; and, as the evening drew on and the crowd increased, the salesmen seized an early opportunity to light the gas. This is the safest means of selling bad meat. Even the trained inspectors have the greatest difficulty in telling the quality of meat by gaslight. One salesman has contrived a dark awning, which he lets down over his stall so as to produce a shade even in the broad daylight, and thus secures an excuse for lighting the gas. By these and many other stratagems, in which rough language and a certain amount of hustling play a prominent part, the refuse of the wholesale market is retailed to frequenters of Smithfield on Saturday afternoon.

As the salesmen are not responsible tradesmen, are simply the porters and assistants of the wholesale dealers, the retail purchaser has no hold upon them. If he has been deceived, if his meat turns out badly, it would be almost impossible to trace it back to the individual from whom it was bought. Evidently, even in a retail market, the salesmen ought to be responsible to the market authorities and to the public. Some means should be adopted to deprive them of their privileges if they behave in an uncivil or gross manner, and, above all, they should wear some badge by which they could be readily recognised and an offence traced home to them. Otherwise a retail market on the same site as a wholesale market, whether for meat or for fish, will simply be used as a means of disposing of such inferior articles as cannot be readily sold wholesale. And this operation will continue to be transacted by rough and irresponsible individuals, whose manners will deter more respectable customers. What the people require, on the contrary, is an orderly retail market held on the site of the wholesale market, so as to enable them to buy at certain hours direct from the wholesale dealers, and thus economise the very large share charged for profits and expenses by the local tradesmen.

SOCIAL SCIENCE CONGRESS: MEETING IN DUBLIN, 1881.

THE twenty-fifth annual meeting of the National Association for the Promotion of Social Science was formally opened in Dublin last Monday by a joint meeting of the secretaries of departments, and afterwards the Committee of Council held a meeting in the New Building, Trinity College. The inaugural address was delivered by the President, the Right Hon. Lord O'Hagan, Lord Chancellor of Ireland, on Monday evening, in the Exhibition Palace, before a large audience, a considerable number of whom were ladies. The president in his address touched upon many topics of considerable interest, and referred to the legal and social reforms which have been accomplished in Ireland since the Association assembled in Dublin in 1861. Lord O'Hagan remarked, in reference to the lunacy laws of Ireland, that in the year 1861 they were almost in the condition in which they had remained after the abolition of the Court of Wards, save as to the establishment of district asylums for the poor, the inspection of lunatic asylums generally, and the rules for the regulation of admission and release. The actual treatment of this unhappy class of our fellow beings had been greatly changed for the better from the time, within living memory, when they were dealt with not as patients to be cured or even as prisoners to be guarded, but as caged beasts to be tormented at the will of sordid physicians and brutal keepers. Towards the close of the last century, Pinel in France, and Tuke in England, exposed the horrors of Bicêtre, York, and Bethlem, and awakened the public conscience to a sense of the cruelty and crime which pervaded lunatic establishments, public and private, without restraint or punishment. But the evil did not promptly find a sufficient remedy. It was only in 1815

that a committee of the House of Commons, making an authoritative pronouncement against still existing iniquities, compelled protective legislation in several measures, which were more or less of service. At last, in 1853, the Lunacy Regulation Act was passed, which, for England, accomplished great and beneficial changes. But when the Congress met in Dublin seven years afterwards, that Act had not been extended to Ireland, and the protection given to lunatics in Ireland was very inadequate. In cases under the control of the Court of Chancery there was no sufficient provision by proper visitation and report for the care even of those possessed of ample means; and none for the discovery of persons kept privately in duress and subjected to ill-treatment. No lunatic could be brought under the protection of the Court without the great cost and painful exposure of a commission; and, whilst such a state of things was evil in relation to the rich, sufferers of small fortune could not receive even that protection. All this has been happily altered since 1861. Ten years afterwards the Irish Lunacy Regulation Act embodied all the useful provisions of the English statute, and added many which have been found most salutary. The most careful investigation is instituted, and the fullest notice given in every case, and for the past five years only one commission has been demanded. In 1871 the number of returns furnished to the Lunacy Offices from the Committees of Estates was 97, and in 1880 it had risen to 194, whilst in 1871 the reports from medical visitors had been 103, and in 1880 they had increased to 364. The Act, although successful in its operation, could not reach a large class of persons in poor circumstances, and for their protection a further Act was passed in 1880, enabling the friends of an alleged lunatic to obtain from the county-court judge, at very little expense, a declaration of lunacy, with a scheme for the management of his person and his little property, and also to secure for him the advantages of medical visitation and stated reports on his condition and treatment. A similar Act was passed for Scotland in the same session (the Judicial Factors' Act), and in this needful reform Ireland and Scotland are both in advance of England. This will complete the necessary protection of persons to whom the public asylums are not available from their possession of pecuniary means; but beyond the Court of Chancery and the county court, and the county asylum, there are multitudes of unhappy creatures, people of weak and disordered minds, who go at large through the country without any legal care. Years ago it was calculated that there were 8151 imbeciles and idiots in Ireland, of whom 1740 were in workhouses, 638 in asylums, and 5733 utterly neglected. The lapse of time has not lessened the number.

On the question of Sanitary Progress the president spoke as follows:—"I pass on to tell you what has been done since 1861 in a department not less important than any other within the range of your inquiries—the department of public health. In that year Ireland had, as its chief sanitary authorities, expiring parish vestries, clothed with antiquated powers, which had been vested in them so far back as the year 1818. There were some other bodies acting for similar purposes, under statutes which had once had an equal application to England and Ireland, but had continued in action here after they were repealed in England. Five years after the meeting of the Congress in 1866 the vestries were finally abolished, and the guardians of the poor were entrusted with sanitary powers identical with those existing in England and Wales. The change was great and wholesome, and was pushed to better issues when the Local Government Board was established in 1872. It was armed with large authority, and acted with energy and success. An Act of 1874 developed the sanitary system and brought it into full operation throughout the country. Under that Act the whole of Ireland was divided into sanitary districts, called urban sanitary districts and rural sanitary districts. The urban districts consist of towns having a population of 6000. The governing body of the town is made the sanitary authority. The rural districts consist of the Poor-law unions, and the boards of guardians are the sanitary authorities. There are now 56 urban sanitary districts and 163 rural sanitary districts, and in each of those districts a complete sanitary staff has been organised under the orders of the Local Government Board. The medical officer of the dispensary district is, in all cases, the sanitary officer or medical officer of health. The principal duty of the sanitary authorities and their officers consists in the inspection of their districts, and in taking all necessary steps to compel the removal or abatement of nuisances, provide a proper supply of water, and construct, or cause to be constructed, where it may be necessary, proper sewers and drains. The Public Health Act of 1878 repealed all previous sanitary Acts, re-enacting, amending, and consolidating their provisions, so as to comprise in one statute the entire sanitary law as it at present exists in Ireland. The principal subjects dealt with in the Act are sewerage and drainage, scavenging and cleansing, water-supply, abatement and removal of nuisances, lodging-houses, markets, slaughter-houses, and infectious diseases. So that the scope of the statute is comprehensive, as the machinery for effectuating its beneficial purposes is complete. I rejoice to say that its worth has been widely recognised. The increasing activity of the local authorities is demonstrated in the most conclusive way by the amount of their expenditure for the last six years, as it appears in the audited accounts of the Board. It is not easy to over-estimate the importance to Ireland of the sanitary work which is thus proved to have been done. It has been of double advantage, by relieving the poor at seasons of sore distress and securing the permanent improvement of the health of the community. Again, I think I may confidently say that, in a department so deeply affecting the comfort and the happiness of a people, Ireland need not be ashamed of the progress she is making and has made. And for her that progress is especially important. Health and social morals run closely together. Cleanliness and godliness are in alliance; and wholesome and commodious dwellings are important instruments of civilisation. The squalidness of his home drives the artisan for light and solace to the public-house. The mud cabin, with its single room and crowded foulness, is not very compatible with the formation of habits of ordered industry; and save in a country still marvellously pure, its inmates would be subject to many dangers. It is of great consequence, for reasons like these, which might be largely multiplied, that our sanitary work should extend, not merely to lodging-houses, but as far as may be to the dwellings generally of the humbler classes; and that the English effort in that direction, which has been so happily prosecuted under the benevolent guidance of Lord Shaftesbury, should have cordial imitation here."

On Thursday, October 6th, Dr. Charles Cameron, M.P., Chairman of the Health Department, delivered an address on Micro-organisms and Disease, in which he rapidly sketched the great advance made in this branch of medical knowledge during the last few years. After alluding to the observations of Pasteur, Lister, Chauveau, Klebs, Klein, and others, on the specific micro-organisms of chicken cholera, splenic fever, ague, tuberculosis, hydrophobia, &c., he drew two very sound practical lessons. In the first place, such facts showed the necessity, from the standpoint of public health, of regarding any person suffering from an epidemic or contagious malady as a hot-bed swarming with living organisms, which cause and spread the disease. These disease germs are very tenacious of life, and are eliminated most actively in some diseases when the patient is convalescent, and when it is nobody's duty to look after him. It would be better, therefore, to spend money in securing the destruction of these seeds of disease; and it should be the duty of the public sanitary authorities to provide convalescent homes for patients recovering from serious infectious diseases, where they might be taken care of until all danger of the propagation of infection by them had ceased. Secondly, the discoveries named showed the enormous importance of the study of comparative medicine and pathology, which should be stimulated and aided by the establishment of recognised chairs in the great medical schools. It is only by such knowledge that preventive medicine can be most rapidly and surely advanced.

Mr. Henry C. Burdett, F.S.S., read a paper on the Desirability of Hospitals being placed under State Supervision, in which he adduced a great mass of evidence in favour of this course being adopted. The administration of the hospitals as at present conducted is so uncertain and unsatisfactory that inquiry is needed to secure amelioration in the interests of the poor. To facilitate a right judgment, and to furnish reliable data, Mr. Burdett had prepared a variety of elaborate and carefully compiled statistical tables, based upon the published reports and statements of the various institutions. These showed that the cost of management in sixty-one general hospitals varies from 2½ per cent. at Cork to 27½ per cent. at the Metropolitan Free Hospital; the cost per patient per week from 9*s.* 4*d.* at the Cork County Hospital, to

£3 0s. 4d. at the Leeds General Infirmary. The special hospitals show equally startling discrepancies. Out of a total of 4579 beds for the whole metropolis, 3486 are provided by the hospitals situated within a radius of a mile and a half from Charing Cross. At present North London, with a population of nearly 1,000,000, possesses but one hospital, the Great Northern, with 53 beds; the East-end, with its river-side and manufacturing population of 1,100,000, is dependent upon the London Hospital with 790 beds, and the Metropolitan Free Hospital with 20 beds, both of which are inconveniently situated for a large proportion of the inhabitants. The West-end, with a population of 900,000, has but two hospitals—St. Mary's with 190, and the West London with 60 beds respectively. A population of nearly one and a half millions on the Surrey side of the Thames has to rely upon Guy's with 700 beds and St. Thomas's with 400 available beds. The unsatisfactory condition of the present out-patient system, and especially of that in force at the large metropolitan hospitals, demands reform. At the present time more than a million people, or one in three, receive relief at the London hospitals. It is desirable that every hospital and medical institution intended for the relief of the suffering poor should be administered by a board of management, subject to periodical election by the governors, upon which board the medical staff of the charity should be adequately represented. An authoritative supervision over the administration and a public audit of the accounts of all such institutions are needed to secure a right distribution of medical relief, and a more economical expenditure of the funds entrusted to the boards of management. A public audit is absolutely necessary to check extravagance and to protect the public, which has at present but little or no voice in restraining reckless mismanagement. An authoritative supervision would prevent foolish squandering, the occupation of unhealthy and unsuitable buildings as hospitals, and would promote good feeling between the hospital authorities and the medical staff. The absence of organisation and combination amongst the medical institutions throughout the country materially lessens their usefulness. This is strongly enforced by the enormous and needless difference in the cost of management and maintenance of different hospitals. In the administration of the wards, so far as it affects the treatment of the patients, and especially in the management of the nursing arrangements, the medical staff should have an authoritative voice. Recent events have shown the public and the medical profession to be in substantial accord on this point. Unfortunately, in the majority of the large hospitals the nursing arrangements are under the control of a matron, aided by a nursing committee, and only indirectly, if at all, assisted by those alone qualified to direct—viz., the medical staff. Out of twenty-two hospitals having medical schools, there are but seven where this important department is superintended by a nursing committee upon which the medical element is represented. The importance of medical education, and the adequate training of the members of the medical profession, require an intelligent recognition of the relation of the hospitals to their medical schools, to ensure an improvement in such relations. Medical education in this country, however, almost entirely depends upon private speculation and haphazard enterprises whose success rests upon the preservation of a harmonious relationship between corporations with *apparently* separate aims. Should this harmony between hospital and school at any time be ruptured, the existence of the school becomes at once imperilled, thereby seriously endangering the interests of the public. During recent years the Metropolitan Asylums Board has built and opened some of the most extensive and complete of modern hospitals. These infirmaries afford a magnificent field for the treatment and investigation of disease, for pathological research, and for medical education. The appointment of a controlling authority, endowed with adequate powers to sanction, restrict, or prohibit the erection of a new or the extension of an already existing hospital or dispensary, was, he thought, urgently called for. The social and public aspects of the question of the right of government of our hospitals alone demand an immediate investigation, since it is not the sick poor at all who are being benefited, but nearly the whole wage-receiving and industrial classes, a large proportion of whom are well-paid artisans.

Mr. Michael, Q.C., read a paper advocating the Compulsory Notification of Infectious Diseases, and said that the system had been adopted in some towns under private Acts; but he desired to see the principle generally applied.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Brigade-Surgeon Henry Joseph Rose is granted retired pay, with the honorary rank of Deputy Surgeon-General; Surgeon-Major Richard Colville Parkinson has been placed on temporary half-pay; the second Christian name of Surgeon Johnston, M.B., is Halcro, and not Halero, as stated in the *Gazette* of August 23rd, 1881; the surname of the surgeon described in the *Gazette* of August 23rd, 1881, as William Baptie, M.B., is Babtie.

MADRAS MEDICAL ESTABLISHMENT.—Surgeon-Majors to be Brigade-Surgeons, dated 27th November, 1879:—Joseph Marcus Joseph, M.D.; Edward Somerset Cleveland, M.D.; William Henry Harris, M.D. (since retired); William Henry Rean, M.D.; Alfred Sanderson, M.D.; Clarence Cooper, M.D.; Samuel Jardine Wyndowe, M.D. (since retired); William Robert Cornish, C.I.E.; Ardern Hulme Beaman; George Stewart Watson Ogg; William Pearl; Edmund Eyre Lloyd, dated 1st April, 1880; Michael Cudmore Furnell, M.D., dated 16th May, 1880; George Alexander Burn, M.D., dated 7th February, 1881; Robert Dempster, dated 28th March, 1881.

MILITIA MEDICAL DEPARTMENT.—Surgeon-Major Thomas Starkey Smith, 3rd Battalion, the Prince of Wales's Volunteers (South Lancashire Regiment), resigns his commission, dated 5th October, 1881.

ADMIRALTY.—The following promotion has been specially made for gallant conduct at the action of Majuba Mountain, during the recent operations in the Transvaal:—Surgeon Edward Elphinstone Mahon to be Staff-Surgeon in Her Majesty's Fleet, with seniority of July 18th, 1881. The following promotions have been made:—Staff-Surgeon James Trimble to be Fleet-Surgeon in Her Majesty's Fleet, with seniority of 20th ult.; Staff-Surgeon John T. Comerford, M.D., *Pembroke*, additional for Melville Hospital, vice Trimble; Staff-Surgeon Robert Turner to the *Hibernia*, in lieu of a surgeon, vice Comerford; Staff-Surgeon Robert Grant, M.B., to the *Duke of Wellington*, in lieu of a surgeon, vice Turner; Staff-Surgeon James Dunlop to the *Espiegle*; Surgeon Francis R. M. Loftie to the *Flora*, additional, vice Mahon.

Correspondence.

"Audi alteram partem."

THE TREATMENT OF THE INSANE IN PRIVATE DWELLINGS.

To the Editor of THE LANCET.

SIR,—As no one has called attention to the abuse of statistics, on which depends a portion of the position you take up in THE LANCET of Sept. 3rd in regard to the treatment of the insane, I desire to submit a few facts.

The insanity with which Prichard, Willis, Burrows, &c., dealt when they secured the large proportion of recoveries you adduce consisted of acute mania and melancholia; and it shows either reprehensible ignorance or something worse than a want of candour for a writer in THE LANCET to suggest a comparison of these statistics with those of the whole admissions of modern asylums. The admissions of asylums now include a large percentage (40, 50, 60 per cent., in this asylum last year 66 per cent.) of cases of idiocy, epilepsy, senile dementia, general paralysis, and other coarse brain diseases usually in an advanced stage, and of those cases that have become chronic, often by failure to recover under treatment in private dwellings.

If you will refer to some statistics which I presented in the *Journal of Mental Science* for July, 1877, you will see that there is every reason to believe that of the class of cases on which the dogma of the great curability of insanity is founded, county asylums now cure 84 per cent., a figure which contrasts favourably with the older statistics, when it is remembered that the latter included also the slighter and more transient cases which are successfully treated at home and not sent to asylums, and also included recurrent cases, by aid of which some almost miraculous statistics of the cure of insanity have ere now been given (100 per cent. and upwards). A perusal of earlier papers on this subject would also show you that this great curability, even in selected cases, either in the olden time or now, is more apparent than

real, and is founded largely on cure of attacks or cases, not of persons.

I know little of private asylums, and speak only from the public asylum point of view; and though I disagree with you when you show an ignorance of statistics which is discreditable to a leading journal like THE LANCET, and still more when you indulge in what is little better than indiscriminate and unfounded abuse of the specialty to which I belong, I do agree with you in asserting that, under the gradual development of the desire to have the insane poor properly cared for, whilst no other method of doing so than sending them to the asylum is available, and under the stimulus of a divided chargeability, masking the costliness of the process, an immense mass of broken-down humanity is now sent into county asylums—a mass of which a large proportion might more suitably be cared for in private dwellings; and of whom, I may add, a large proportion would not have been regarded as "insane" in the good old times to which your *couleur de rose* statistics refer.

The present impediment to their now being cared for in private dwellings is that a sufficient pecuniary allowance is rarely or never granted by the Poor-law guardians, who have to deal with such cases on routine pauper principles, and that there is no adequate supervision available to ensure their proper care, and that such allowance is expended for their benefit. I believe these difficulties are only to be overcome by entirely removing the care of lunacy from the ordinary Poor-law authority, and placing all lunacy under a special county authority, subject to a separate central Government department.—I am, Sir, yours, &c.,

T. A. CHAPMAN, M.D.

Hereford County and City Asylum, Sept. 27th, 1881.

*** It is passing strange that correspondents cannot discuss this question without a vehemence which seems to indicate loss of temper. It is possible to be plain and forcible without being abusive. For rejoinder to the remarks offered on our use of statistics, and the "reprehensible ignorance, or something worse than want of candour," shown by "a writer in THE LANCET" (or, in more correct phraseology, *ourselves*), we will only reply that the comparison we institute is not based on the returns published by the Commissioners, but on a calculation of returns made by medical officers of asylums in which an opinion is expressed as to the nature of the cases under their care. These returns are counter-checked on the evidence supplied by the average period of residence in asylums in the several classes of cases discharged as cured. We can assure our correspondent that we do not ignore the fact that the bulk of the asylum population is now, whatever it may have been in the past, incurable. Insanity is very apt to become "incurable" when it is simply diagnosed and classified as *incurable*, and left to, let us say, nature.—ED. L.

THE INTERNATIONAL MEDICAL CONGRESS.

To the Editor of THE LANCET.

SIR,—I regret to find that the report given in THE LANCET of Aug. 13th, p. 297, of my remarks on Professor His's communication to the Anatomy Section of the International Medical Congress and the accompanying statement of the general opinion of the meeting are such as to convey a somewhat erroneous impression of what passed, and to express more of dissent from Professor His's proposition than was intended by the speakers on that occasion.

Without entering into the details of the discussion, which will find their proper place in the forthcoming report of the proceedings of the Congress, I am desirous, through your journal, to explain that the object of my remarks was to say, that from Professor His's interesting statement of facts and illustrations brought before the meeting, and from the valuable contributions to the knowledge of human embryology contained in his recently published work on that subject, I could then more readily than formerly give a general assent to his proposition—viz., "That the number of human embryos observed was now such as to enable us to determine their normal characters;" but that at the same time I still had some fear that in the earliest stages of development the pathological conditions so frequently existing in aborted products greatly interfered, and perhaps more than Professor His might be disposed to admit, with the determination of some doubtful points of structure; and that in particular further observations would be required to establish with certainty the mode of origin and early condition of the allantois which he had described.

I did not, however, mean by this to assert that Professor His had not taken due care to guard against error from the existence of the pathological conditions referred to, which conditions he must know as fully as most other embryologists; nor do I think that the anatomists present at the meeting went further than I did in expressing doubts as to the validity of the evidence adduced by Professor His in support of his proposition. On the contrary, I should say that they fully appreciated, as I did, the scrupulous care in observation and the extensive and accurate knowledge of his subject, which gave a high value to Professor His's communication.—I am, Sir, your obedient servant,

London, Oct. 1st, 1881. ALLEN THOMSON.

Medical News.

UNIVERSITY OF EDINBURGH.—The following is the list of candidates who received the Degrees of Doctor of Medicine, Bachelor of Medicine, and Master in Surgery, on Aug. 1:—

DOCTOR OF MEDICINE.

Adam, John (M.A. Edin.), Scotland, M.B. and C.M.
Alexander, Reginald Gervase (M.A. Cantab.), England, M.B. and C.M
Clarke, Henry Joy, England, M.B. and C.M.
†Clouston, Chas. S. Orkney, M.B. and C.M. (Second Class Honours).
Collie, David, Scotland, M.B. and C.M.
‡Coldstream, Alexander Robert, Scotland, M.B. and C.M.
Cox, Joshua John, Ireland, M.B.
‡Davison, James Thomas Richard, Argentine Republic, M.B. and C.M.
‡Devereli, Henry George, India, M.B. and C.M.
‡Douglas, Charles Edward, India, M.B. and C.M.
†Gibson, George Alexander (D.Sc. Edin.), Scotland, M.B. and C.M.
*Hay, Matthew, Scotland, M.B. and C.M. (with First Class Honours and Ettles Prizeman).
†Lamb, William, Scotland, M.B. and C.M.
†Lawson, Robert, Scotland, M.B. and C.M.
Low, Alexander Bruce, Scotland, M.B. and C.M.
M'Bride, Peter, Hamburg, M.B. and C.M.
Macnaughton, William Alex. (M.A. Edin.), Scotland, M.B. and C.M.
‡M'Donald, Duncan (B.Sc. Edin.), Scotland, M.B. and C.M.
*M'Neill, Roger, Scotland, M.B. and C.M.
‡Miller, William Birkmyre (M.A. St. And.), Scotland, M.B. and C.M.
*Moodie, Robert, Scotland, M.B. and C.M.
†Murray, James (M.A. Edin.), Scotland, M.B. and C.M.
‡Oram, Arthur Murray, Australia, M.B. and C.M.
Oswald, Henry Robert, India, M.B. and C.M.
Pountney, William Edward, England, M.B. and C.M.
‡Shaw, Oliver Cromwell, England, M.B. and C.M.
‡Sanctuary, Thomas, England, M.B.
Smith, Andrew, Scotland, M.B. (with Second Class Honours).
†Thomson, David George, Scotland, M.B. and C.M.
‡Trotter, Leslie Batten, England, M.B. and C.M.
Turner, William (M.A. Aberd.), Scotland, M.B. and C.M.
Williams, William Henry, England, M.B. and C.M.
Williamson, Robert Lamley, England, M.B. and C.M.
Wilson, John, Scotland, M.B. and C.M.
*Woodhead, German Sims, England, M.B. and C.M.

* Those who have obtained Prizes for their Dissertations.
† Deemed worthy of competing for the Dissertation Prizes.
‡ Commended for their Dissertations.

BACHELOR OF MEDICINE AND MASTER IN SURGERY.

Aitken, James Hepburn, Scotland.
Baildon, Francis Joseph, England.
Balfour, John Hutton, Scotland.
Bannerman, William Burney, Scotland.
‖Baron, Barclay, Josiah, England.
Bateson, John Francis, England.
Bennett, Richard Charles, Trinidad.
Birrell, Wm. Geo., Scotland. (Received the Degrees on Nov. 27th, 1880.)
Black, John Lyell, Scotland.
Blaikie, Robert Henry, Scotland.
Borthwick, Thomas, Scotland.
‖Bowes, Robert, Scotland.
Bradley, William Edward, England.
Brodie, William Haig, Scotland.
Brown, Thomas, Scotland.
Bruce, David, Australia.
Bruce, Robert Cathcart, India. (Received the Degrees on Nov. 27th, 1880.)
Buchan, John Greig, Orkney.
‖Calder, James Arthur Lawrence, Jamaica.
Clark, Henry Martyn, India.
Corser, Francis Richard Sandford, England.
Cox, James Wharton, Sydney.
Crawford, Dirom Grey, India.
Dalzell, William Robert (M.A. Edin.), India.
Delepine, Camille Victor, France.
Doig, William, Scotland.
Doule, William Jones, Scotland.
Doyle, Arthur Conan, Scotland.
Dunlop, James Dunlop, Scotland.
Fearns, Robert, Scotland.
Ferguson, James Mitchell, Scotland.

Fitzpatrick, Manley Montague, England.
Fraser, Frank, England.
Fraser, John Mosack, Scotland.
Fry, William Walter Baldock, England.
‡Gibson, John Lockhart, Australia.
Grant, Alexander (M.A. Edin.), Scotland.
Grant, Leonard, Scotland.
Grant, Ogilvie, Scotland.
Hamilton, David Rogerson, Scotland. (Received the Degrees on Jan. 29th, 1881.)
Harding, William, England.
Hartley, Alfred, England.
Harwood, Septimus, England.
Haynes, Sydney Walter, England.
Heath, Joseph, Ireland.
‡Hepburn, David, Scotland.
Herman, Christian Lawrence, Cape Town.
‡Hewetson, James, England.
Hoffman, Josias Matthiam, Africa.
Hosegood, William, England.
Housman, James Gilpin, England.
Huxtable, Louis Ralston, Tasmania.
Innes, Francis William, Rangoon.
Jelly, Frederick Adolphus, England.
Johnston, Robert M'Kenzie, Scotland.
Kennedy, Charles, Scotland.
Kerr, William Watt (M.A. Edin.), Scotland.
King, Herbert Dove (M.A., B.Sc., Edin.), England.
Kirkpatrick, Roger, India.
Laidlaw, Robert, Scotland.
Laurie, Robert, England.
Lawson, Robert James, Scotland.
‡Leslie, George, Scotland.
Low, Charles, Australia.
Macdonald, James (M.A. Edin.), Scotland.
Macdonald, Roderick John Johnstone, England.
Mackay, George Hugh, Scotland.
Mackew, Samuel, England.
Maclean, Norman, Scotland.
Macleish, Archibald Lyle (M.A. Edin.), Scotland.
Macleod, William Aitken, Scotland.
Macpherson, Alfred, England. (Received the Degrees on Nov. 27th, 1880.)
Macrae, John Farquhar, Scotland.
Malcolm, John David, Scotland.
Mercer, Walter, Scotland.
Mill, James, Scotland.
Morrison, William, Scotland.
Mounsey, George Harold, England.
Mudie, Henry Ferguson (M.A. St. And.), Scotland.
Murray, Walter Galbraith, Ireland.
Munro, Robert Hector, Scotland.
Myles, Thomas Patrick, Scotland.
Nichol, Charles Edward, England.
Norfor, Brooke Owen, India.
Ogilvy, Walter Stewart, Scotland.
Orr, James, Ireland.
Pechell, Augustus Alexander, England.
Perkins, George Chapman Steele, England.
Phillips, Henry Whitby, England.
‡Proudfoot, George, Scotland.
Renwick, George James (B.A.), Sydney, Australia.
Ridgley, Thomas, England.
Ritchie, David William Leone, Scotland.
Robertson, John Robert Stevenson, England.
Rohan, George Virgile, Mauritius.
Ross, James Maxwell (M.A. Edin.), Scotland.
Rowland, Ernest Daniel, England.
Russell, Alexander Fraser (M.A. Edin.), Scotland.
Sauer, Johannes, Africa.
Scholtz, William Christian, Cape of Good Hope.
‡Scot Skirving, Robert, Scotland. (Received the Degrees on April 29th, 1881.)
Sevier, Alfred Hynam, Russia.
Sibbit, Robert Smith, England.
Sinclair, Robert Fraser, Scotland.
Sinclair, William James, Orkney.
Smith, John (M.A. Edin.), Scotland.
‡Smith, Sinon Woronzow, America.
Soutar, James Greig, Scotland.
Sorley, John, Australia.
Stalker, Alexander Mitchell (M.A. Edin.), Scotland.
Stalker, Daniel (M.A. Edin.), Scotland.
Stallard, John Prince, England.
Standen, Peter, England.
Stiell, Gavin, Scotland.
Stuart, Charles, Scotland.
Sutherland, Robert Thomas, Natal.
Thomas, Adolphe Harrison, England.
Thomson, John, Scotland.
‡Thomson, Matthew Barclay, Australia.
Tuke, John Batty, New Zealand.
Tulloch, John Patrick (M.A. Edin.), Scotland.
Valentine, John, Scotland.
‡Viljoen Anthony Gysbert, Cape of Good Hope.
Walker, Edward Brooking Cornish, England.
Ward, Alfred, England.
Watson, James Smith, Scotland.
Waugh, John (M.A. Edin.), Scotland.
‡Wells, Arthur Poulett Lethbridge, England.
Welsh, David, Scotland.
Welsh, Robert Crosbie, Scotland.
Williams, John Humphry, Wales.
Williamson, Richard Frederick, England.
Wilson, George, Scotland.
Wolseley, Henry John, Demerara.

‡ Passed the Examinations with First Class Honours.
‡ Passed the Examinations with Second Class Honours.

BACHELOR OF MEDICINE.

Aitchison, Henry Hyslop, England.
Cox, Frederick John William, Scotland.
Hern, John, England.
Orr, William Young, Scotland.
Smith, Robert Wilkie, Scotland. (Received the Degree on April 20th, 1881.)

MASTER IN SURGERY.

Robert Wilkie Smith, M.B., Scotland.

The Ettles Prize for 1881 has been awarded to Barclay Josiah Baron, M.B., C.M. The Beaney Prize has been awarded to David Hepburn, M.B., C.M. The Goodsir Prize has been awarded to Matthew Hay, M.D. The Wightman Prize has been awarded to Francis William Grant. The Buchanan Scholarship has been awarded to James Hewetson, M.B., C.M.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Sept. 29th:—

Bott, Joseph, Dunmow, Essex.
Finlay, Archibald, Custom-House-terrace, Victoria Dock.
Haddock, Wm. Isaac, Acland-street, Burdett-road, Bow.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Hormasji Rustomji Modi, Bombay; Thos. Edward Rogers, Charing-cross Hospital.

A PRELIMINARY committee has been appointed with the object of promoting the formation at the East-end of a society in aid of the funds of the Victoria-park Hospital.

DUBLIN ORTHOPÆDIC HOSPITAL.—A bazaar in aid of the funds of this hospital will be held on November 23rd and following day.

INTERNATIONAL ELECTRICAL EXHIBITION AT THE CRYSTAL PALACE.—It is intended to hold an exhibition of nearly all the systems of electric lighting at the Sydenham Palace in December next.

GUY'S HOSPITAL MEDICAL COLLEGE.—Mr. Albert Edw. White has obtained the Entrance Scholarship in Arts, and Mr. J. W. Washburn the Entrance Scholarship in Science, each 125 guineas.

DURHAM UNIVERSITY.—The following candidates have passed the preliminary examination in Arts for the degree of M.B.:—R. G. Cross, T. W. Dalglish, T. Morton, H. L. Smith, and C. W. Turner. Examiners: Alfred Plummer and Thomas Thornton.

ON Tuesday last, Mr. George Skirving of Wednesbury, whilst walking along the Darlaston-road, was observed to stagger. He was assisted into a neighbouring house, and almost immediately expired.

THE Hospital Sunday Fund received its first legacy last week—one of 300*l.* free of duty—from a gentleman who made it a stringent condition of the acceptance of the bequest that his initials only, "T. J. M.," should be given in any public announcement.

DUBLIN CONVALESCENT HOME.—A meeting of the subscribers to the proposed convalescent home in Dublin for patients suffering from contagious diseases was held last week to consider a proposal to allocate the funds subscribed to the Cork-street Fever Hospital under certain conditions. Owing, however, to the limited attendance of the subscribers, 8 out of some 900 only being present, nothing was done in the matter, and the meeting was adjourned to a future day.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ALLEN, R. R., L.R.C.S.I., L.R.C.P.Ed., &c., has been appointed Indian Medical Officer to Pietermaritzburg, Natal, South Africa.

ANDREW, E., M.D.Lond., F.R.C.S.Eng., has been appointed Surgeon to the Eye, Ear, and Throat Hospital for Shropshire and Wales.

BULTEEL, M. H., M.R.C.S., L.R.C.P.Lond., has been appointed Surgeon to the Provident Dispensary of the Royal Albert Hospital and Eye Infirmary, Devonport.

BUSBY, R. A., M.R.C.S., has been appointed Resident Medical Officer to the Bath General or Mineral Water Hospital.

CADDY, H., M.R.C.S.E., L.S.A.Lond., has been appointed Medical Officer of Health of the Eastern Division of the Truro Rural Sanitary District.

CARTER, R. B., F.R.C.S.Eng., has been appointed Consulting Surgeon to the Eye, Ear, and Throat Hospital for Shropshire and Wales.

EADON, W. F. B., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Second District of the Chipping Sodbury Union.

FIDDES, T., M.B., C.M.Aber., has been appointed Medical Officer for the Urmston and Flixton District of the Barton-on-Irwell Union.

GRAHAM, C. R., M.R.C.S.E., L.R.C.P.Ed., has been appointed Senior Resident Medical Officer to the General Hospital for Sick Children, Pendlebury, Manchester.

HEISCH, C., F.C.S., has been appointed Public Analyst for the County of Hertford.

HOAR, C., M.B., C.M.Aber., has been appointed Medical Officer for the Fifth District of the Battle Union.

KIDD, P. H., M.B., C.M.Ed., late House-Surgeon to Greenock Infirmary and Fever-house, has been appointed House-Surgeon to Great Yarmouth Hospital.

MOORE, Mr. E. H., has been reappointed Public Analyst for the Eastern Division of the County of Sussex.

OZANNE, F. N., M.R.C.S., has been appointed House-Surgeon to the Weston-super-Mare Hospital and Dispensary.

ROW, F. E., M.R.C.S., L.R.C.P., has been appointed Dispensary Surgeon to the Royal Albert Hospital, Devonport.

SMYTH, S., M.R.C.S., has been appointed House-Surgeon and Secretary to the Royal Isle of Wight Infirmary, vice Beresford, resigned.

TREHARNE, J. L., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Splotlands District of the Cardiff Union.

Births, Marriages, and Deaths.

BIRTHS.

ARNOTT.—On the 29th ult., at the Vicarage, Bussage, near Stroud, Gloucestershire, the wife of the Rev. Henry Arnott, F.R.C.S., of a daughter.

HUTCHINSON.—On the 1st inst., the wife of S. J. Hutchinson, L.D.S., M.R.C.S., of Hill-top Villa, Brondesbury, N.W., and Brook-street, W., prematurely, of a daughter, who only survived a short time.

LUCEY.—On the 28th ult., at The Elms, Bush Hill Park, Enfield, the wife of William C. Lucey, M.D., of a daughter.

STEWART.—On the 29th ult., at Charlotte-square, Edinburgh, the wife of Professor Grainger Stewart, M.D., of a son.

MARRIAGES.

CONOLLY—ROUCH.—On the 29th ult., at St. Paul's Church, Greenwich Beaumont Rowley Conolly, M.D., to Helen Rouch, of Madeira.

DRURY—D'ARCY.—On the 28th ult., at the Parish Church of St. Mary Abbot's, Kensington, Richard Drury, M.D., son of William B. Drury, Esq., Senior Registrar of the High Court of Chancery, Ireland, to Isabel Jane, youngest daughter of the late Rev. John D'Arcy, Rector of Galway.

JAKINS—VOSPER.—On the 4th inst., at South Petherwin, by the Rev. T. Wens, Percy S. Jakins, M.R.C.S., of 9, Osnaburgh-street, Regent's-park, to Emily, third daughter of the late William G. Vosper, of Brockhill, South Petherwin, Launceston, Cornwall.

JONES—PERRY.—On the 29th ult., at Dodderidge Chapel, Northampton, by the Rev. Frederick A. Jones (brother of the bridegroom), assisted by the Rev. T. Arnold and Rev. J. Oates, Arthur H. Jones, M.D.Lond., to Ann, eldest daughter of Pickering P. Perry, J.P., of Northampton.

MCGOWAN—SHATTOCK.—On the 5th inst., at Lewis's Mead Chapel, Bristol, by the Rev. Ambrose H. Blatchford, B.A., William McGowan, B.A., M.D., of Maghera, co. Derry, Ireland, to Annie Woodward, daughter of James May Shattock, Esq., of Runnington Lodge, Durdham-park, Bristol.

SNOW—NORTON.—On the 17th ult., at the Parish Church of St. John, Weston-super-Mare, Herbert Lumley Snow, M.D.Lond., to Florence Charlotte Amelia, eldest daughter of S. Norton, Esq., of Weston-super-Mare.

DEATHS.

ADDISON.—On the 26th ult., at Albert-road, Brighton, William Addison, F.R.S., F.R.C.P., &c., in his 80th year.

BOISRAGON.—On the 20th ult., at Denbigh-street, Pimlico, Theodore S. G. Boisragon, M.D., in his 72nd year.

BRITTAIN.—On the 2nd inst., at Bolland's-court, Chester, after thirty-six hours' illness, Thomas Brittain, Esq., F.R.C.S., aged 71.

BROWN.—On the 28th ult., at Cupar, Fife, Joseph John Brown, M.B., F.R.C.P.Ed., Medical Superintendent of the Fife and Kinross Lunatic Asylum, aged 35.

HALL.—On July 31st, at Hobart, Tasmania, R. Swarbeck Hall, M.R.C.S., L.S.A.Lond., aged 77.

HITCH.—On the 29th ult., at Eastbourne, Saml. Hitch, M.R.C.P.Lond., in his 81st year.

MURPHY.—On the 1st ult., after a few days' illness, at Fort Lahore, India, Surgeon-Major Robert Murphy, Army Medical Department, younger son of M. E. Murphy, Esq., of Limerick.

PLAYFAIR.—On the 4th inst., at Longridge-road, S.W., George Ranken Playfair, M.D., late Inspector-General of Hospitals, Her Majesty's Indian Army.

RAKE.—On the 20th ult., at Fordingbridge, Ellen Reynolds, wife of Beaven Rake, aged 50. (John i. 29, John iii. 16.)

N.B.—*A fee of 2s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 A.M. by Steward's Instruments.)

THE LANCET OFFICE, Oct. 6th, 1881.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Sept. 30	29·39	E.	48	47	85	64	44	..	Foggy
Oct. 1	30·28	E.	51	49	96	64	45	..	Foggy
,, 2	30·21	E.	57	52	92	61	43	..	Bright
,, 3	30·18	E.	53	50	91	62	44	..	Hazy
,, 4	30·22	E	52	49	85	57	47	..	Cloudy
,, 5	30·14	N.E.	45	42	60	49	38	..	Bright
,, 6	29·25	N.	47	45	..	54	35	..	Overcast

Medical Diary for the ensuing Week.

Monday, Oct. 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

UNIVERSITY COLLEGE HOSPITAL.—Ophthalmic Department.—2 P.M., and on Tuesday, Thursday, and Friday, at the same hour.

Tuesday, Oct. 11.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Oct. 12.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department.—1.45 P.M., and on Saturday at 9.15 A.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

HUNTERIAN SOCIETY.—7.30 P.M. Council Meeting.—8 P.M. First General Meeting: Introductory Remarks by the President.—Mr. T. Hutchinson, "On Second Attacks of Syphilis."

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. B. Wills Richardson, "On Multiple Staining of Animal and Vegetable Tissues."

Thursday, Oct. 13.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—3½ P.M. Mr. J. E. Adams, "On Unilocular Diplopia."—Dr. W. M. Ord, "On Cases of Unilocular Diplopia."—Mr. J. E. Adams, "On Cases of Suppurating Ophthalmitis from Septic Embolism."—Dr. Brailey, "On a Case of Tuberculosis of the Eye."—Dr. Walter Edmunds: Microscopical Specimens:—(1) Tubercle of Choroid. (2) Perineuritis Optica twenty-four hours after Fracture of Skull.—Living Specimens at 8 o'clock.

Friday, Oct. 14.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8½ P.M. Dr. Wiltshire, "On a Case of Ruptured Ovarian Cyst."—Mr. Christopher Heath, "On a Case in which a large Odontome was successfully removed."—Mr. C. H. Keetley, "On a Case of Charcot's Joint Disease (Living Specimen)."—Mr. C. T. Dent, "On a Case of Strangulated Hernia (Littré's)."

Saturday, Oct. 15.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Local papers containing reports or news-paragraphs should be marked.

We cannot prescribe, or recommend practitioners.

Lectures, original articles, and reports should be written on one side only of the paper.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

"PARISH DOCTORS."

A CORRESPONDENT of the *Echo* writes as follows on the above subject:—

> "Is there in any country a more hard-worked or ill-paid class of officials? Out of a pay already pitiful in amount they are required to give medicines to the sick. What class of medicines can they give, or what leisure have they to study their profession? Compare the parish doctor, with his daily and nightly work over an enormous district, with the parish rector, with his easily-earned and fair salary, his petty duties, and his ample leisure, and say which of the two is doing most good for England and the people. The medical profession should distinctly combine and 'Boycott' the Poor Law service until it is made good, and not almost a sham, as it now is. The pay needs to be raised, to be made to increase after certain years of service; a pension should be assured to men worn out in the public service; and the widow of a medical man dying of typhus or infectious disease caught in the fever-haunted dwellings of the poor should have as good a claim to pension as the widow of an officer who dies on the field of battle."

This is a just and clear statement of the facts, and we heartily agree with the suggestion that the medical profession should refuse the service of the Local Government Board until the grievances of its medical officers, often brought under the notice of the Board and as often disregarded, are redressed.

Ignoramus.—We have made inquiry at M. Faure's agency in the Strand, and are informed that the accumulators at present in use, which have been in operation for six months, show no signs of deterioration.

One Interested.—At the recent preliminary or arts examination at the Royal College of Surgeons there were 610 candidates, of which number 238 were rejected, one of them for the ninth time. Most of the candidates were very weak in arithmetic.

Bibliopole.—The library of the Royal College of Surgeons and the museum were reopened on Monday last.

A Patient.—We cannot credit the extraordinary statement of our correspondent. That any surgeon should advise such "immoral" treatment in cases of prostatic disease is beyond belief. We are convinced that no respectable member would so degrade his profession.

Leopold is referred to the article on Books in our Students' Number, published on Sept. 10th.

Ignotus.—We cannot depart from our rule.

An Old Subscriber.—Huddersfield may be mentioned as a town in which a local Act is enforced, the fee for information being 1s. Parts of Mr. Jacob's combined district (Chertsey, Epsom, &c.) have, we believe, a voluntary arrangement in force, the fee given being half-a-crown. Our correspondent would do well to write to Mr. Jacob on the subject. We cannot pretend to answer the last question, but doubtless it would be best for a local authority to proceed under a local Act.

Dr. Kitchener.—The subject is very important, and is engaging our attention.

Mr. Collier's letter will appear next week.

I. V. R. C.—We cannot publish our correspondent's letter. "Boycotting," which he suggests, is altogether unjustifiable. It would not remedy the evil of which he complains, and would seriously injure the profession in the eyes of all right-thinking men. It surely at best would be doing evil that good may come.

M.D. and *Tortoise.*—The subject will be noticed next week.

A GREWSOME CUSTOM.

THE Japanese authorities have, it appears, a very troublesome question to face this summer in Riukiu. It is the custom there to disinter and wash the skeletons of the dead on the third anniversary of the decease; a harmless habit enough in ordinary times, but one that may entail unpleasant consequences when, as in the present case, the graves contain victims of a cholera epidemic. Yet to forbid the thing by edict would have pretty much the same effect as to make waking corpses a criminal act in Ireland. Riukiu was well nigh decimated by the cholera in 1879, and if this disentombing business begins, there will be fresh hecatombs of victims. It is a dangerous matter to make the functions of the State altogether subservient to popular prejudices. The Japanese Government has resorted to the plan of sending officials here and there to dissuade the people from observing the usual funeral rites this year, but, if that fails, what will the next step be?

MEDICAL EDUCATION AND MEDICAL FEES.

To the Editor of THE LANCET.

SIR,—Much has of late been written about medical education, and not a little also about medical fees; but the relation of the one to the other has scarcely, if at all, been touched upon, and as I believe I can show that this relation is of extreme importance, I hope you will afford me space for a few remarks.

In most undertakings in life the return bears a definite proportion to the outlay, and where this is not so it is probable that (as the gamekeeper said when he found a poacher's snare with a hare in it) "there is something not very right somewhere." The man who sows ten acres does not generally expect to get as much wheat as the man who sows 100, but in the medical profession the man who expends £100 in preparation for it expects to get, and, what is more, often does get, as much return as the man who expends £1000. What is the result? That plenty of people rush to pay £100 for a good chance of getting as much as some have to pay £1000 for. Another result is that in times of pinch the £100 man can live on a return which would be ruin to the £1000 man.

To put it more pertinently, the M.D. Lond. has spent, say, eight to ten years and £1000 over preliminaries, and the L.S.A. Blackfriars four to five years and £100. Both go down to the country and live in the same town; the £100 man accepts work which pays him 2d. to 6d. a visit, and lives on, and the public, seeing no difference, refuse the £1000 man more than the £100 man gladly accepts. Who are the sufferers here? The profession, the £1000 man, and the public: the profession in status and value of its work, the £1000 man in that he can get but a bad return, and does not offer encouragement to others to follow him, and the public in that the sons of all the rising tradesmen in the town will soon be L.S.A. of Blackfriars, while the M.D. of London will cease to exist there.

The influence on medical education is to create a demand for the cheap and the quick, since it is not discriminated in the market from the dear and long; hence short preparation and the proposed elimination of such things as chemistry, physics, materia medica, and medical jurisprudence, for which there is not much time at 2d. a visit.

I do not wish to say anything of ability, but the public do, often most unjustly, when they chance to discover that the £1000 man differs from the £100 one. They say he (the former) is much more clever, putting down to ability what is probably due to training; but I do wish to say that the £1000 and eight year man should have a distinctive title, which cannot be given by the public (as Dr. now is) equally to the £100 man, and that when we have these differences recognised, as they ought to be recognised, in a revised Medical Act, we should establish a scale of fees for certain titles, proportionate to the time and money expended in obtaining them.

The strength of a chain is only that of its weakest link; the status of the profession is only that of its humblest member, since all are equal. If this were so in the legal profession, for instance, the Lord Chancellor would be on a par with the country solicitor, which is absurd. The profession is the same, the only differences are those of time and money, and their results, education and influence; and it is upon a due recognition of these that the future of the science and reputation of our profession must depend.

Those who live in London in the flood of science and the routine of hospital and consulting practice do not recognise the real position of the profession in the country, and therefore they want to begin at the wrong end by compelling increase of time for preparation and of the amount to be learned. A steady demand, and the certainty of a better price for a better article—in fact, of a good return for more outlay of time and money, would have more practical result than any amount of College regulations. Mr. Savory says a lengthened period of study is impracticable "chiefly or solely on account of additional expense" (THE LANCET, Dec. 4th, 1880). Let this additional expense have an assured marketable value and status, and it will be largely incurred by those who can afford it.

Your readers may judge for themselves what share these forces, adverse to improvement, acting over long past periods, may have had in the total exclusion of our profession from the Peerage, in which other professions not more noble are well represented, and from that adequate position in the Legislature which it has in some countries, and might have in this one, with so much advantage to the community in general.

I am, Sir, yours very truly,

Oct. 1st, 1881. FAMA SUPERSTES.

DOES ETHER KILL?

DR. JOHN GILLESPIE publishes an article in the *Philadelphia Medical Times*, the object of which is to prove that the deaths which have been attributed to the administration of ether can be shown to have resulted either from disease or from an improper mode of exhibiting the anæsthetic. The author quotes the published cases of ether fatality, and argues that in every instance there is a want of conclusive evidence that the death was due to the use of the drug.

Mr. W. J. Barkus.—We prefer not to pursue the subject further.

Mr. A. N. Halifax.—Any legally qualified medical man would advise in the case.

Mr. R. W. Watson.—The experience of our correspondent is not peculiar.

Dr. W. Alfred Renshaw.—Thanks for the suggestion, which shall receive consideration.

Dr. J. C. O. Will's lecture will appear in an early number.

HYPODERMIC INJECTION OF QUININE.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Oct. 1st, 1881, as well as in other journals of that date, Mr. W. J. Moore, writing from Bombay, claims to have been the first to introduce this method of administering quinine. A reference to the "Medical Digest," section 402-4, will at a glance show that Dr. James M'Craith, of Smyrna, anticipated Mr. Moore's report. Dr. M'Craith, in two able papers published in the *Medical Times and Gazette*, August, 1862, pp. 120, 267, claims the "discovery, or what is tantamount thereto," for his friend and *confrère*, Dr. Chassend.

I am, Sir, obediently yours,

Oct. 4th, 1881. R. NEALE, M.D. Lond.

Mr. E. Lee.—Coto-bark is the produce of a laurraceous tree growing in Bolivia. The dose of the powdered bark is about five grains. An account of the best method of using the fluid extract will be found in the *Practitioner* for October, 1879.

Civis Medicus.—There was no report of the blood being used as an injection.

Messrs. A. and F. Pears.—Our remarks were quite genera', and did not distinguish particular manufactures.

F. N. C.—Adult "idiots" are received in private and public asylums. The law specially provides for their reception, so that any institution for the insane will do.

UTERINE PAIN.

To the Editor of THE LANCET.

SIR,—An unusual case of uterine pain has been under my notice for several years. The peculiarity is in the time at which it occurs. For many years my patient has suffered with uterine pains, so intense from the fourteenth day after the menstrual discharge as to necessitate her remaining in bed or on the sofa for three days. The period at which the pain recurs is so regular that the patient can tell almost to an hour. There is no pain during menstruation, which is free and regular, both as to time and quantity.

Can any of your correspondents help me to explain this somewhat anomalous condition?—I am, Sir, yours faithfully,

Clarendon Villa, Mildmay-park, N., JAMES WILLIAMSON.
Sept. 21st, 1881.

Zetetes.—If the facts be truly stated, the conduct of Dr. A—— is not consistent with professional honour, and cannot be commended.

W. B.—Professor Virchow's and Mr. Simon's addresses at the International Medical Congress and Professor Owen's speech at Folkestone at the unveiling of the Harvey memorial.

Senex.—Surgery: Fr. Koenig: Lehrbuch d. Spec. Chirurgie, 1878-9, or the larger works of Albert, Billroth, and Lucke (still publishing). In French, Nélaton's work. Obstetrics: Tarnier and Chaubreuil (part published).

A. H. B.—We think 10s. 6d. a visit would be a reasonable charge.

DISTRICT MEDICAL OFFICERS AS MEDICAL OFFICERS OF HEALTH.

To the Editor of THE LANCET.

SIR,—In your note respecting the appointment of district medical officers as medical officers of health, it is expressed "the Local Government Board report they have very generally been found wanting in the execution of the duties of a health officer." I take it that it is the inadequacy of pay which has probably tended to this result, if it is so; and if the Local Government Board compelled local authorities to give proper remuneration for services that should be rendered, there would be no cause for complaint. Naturally details would be better investigated in small areas in distinction to that of large combined districts where the medical officer of health acts more as a superintendent of inspector of nuisances. I am, Sir, yours faithfully,

Sept. 26th, 1881. MEDICAL OFFICER OF HEALTH.

UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—Allow me as a medical graduate who has had considerable experience as an assistant to say a few words upon the question of the employment of unqualified men. Your article of last week upon the subject, though undeniably correct in points, appears to me to be far too sweeping. It is always a healthy thing to consider both sides of a question. Nobody would deny that it is an abuse for a medical man to found several dispensaries at a distance from his own home, as there is always the possibility of the man being incompetent to undertake some pressing case which presents itself; but to a certain extent the evil works its own cure, as it is the interest of a principal to select the best men for such semi-independent branches. Surely before making a raid upon the poor unqualified assistant, who at least has some *raison d'être*, steps should be taken to stamp out the ignorant quack and the still more ignorant prescribing chemist, who flourish at every corner shop in our larger towns. They seem to come and go, advise and visit, as their own sweet wills direct, without challenge or obstruction, while the educated medical student, trained in the wards of hospital, and conversant with disease in every form, is pronounced incompetent to lighten the burden of the overworked practitioner. The correspondent of the *Manchester Courier* writes as though it were the custom of a medical man to entrust his grave surgical cases and instrumental obstetrics to the care of an assistant of whose skill he has no guarantee. The real duty of the average assistant, in my experience, is to visit the convalescent patients, and spare the doctor the merely mechanical portion of his round. Both principal and assistant are benefited by this arrangement, while the taking of the patient's pulse and temperature and the reporting of his symptoms prevent the possibility of a mischance.

When summoned upon a sudden emergency he informs his principal of the fact, and pending his arrival he meets the more urgent symptoms as his experience and reading may suggest. As to the taking of the hard-earned wages of the poor, it simply becomes a question as to whether the alternate visits of a principal and his assistant, together with medicine, are or are not worth five shillings a week, which has been the usual remuneration in the practices in which I have acted. Much can be said for the existence of the town assistant, but when we consider the case of his brother in the country we see that he is an absolute necessity. All the moralising in the world won't get over the fact that a medical man cannot afford in most cases to pay a hundred a year to a qualified man, especially when coupled with a percentage on midwifery, as is usual in these cases. The fact also remains that a medical man has no immunity from the commonly accepted idea of the impossibility of being in two places at the same time. When, therefore, an emergency arises while he is upon his long country round, it simply becomes a case of "half a loaf or no bread." Is it better that the patient should die without help or that he should be attended by one qualified, not legally, but practically? Allow me to remark, in conclusion, and I think that every medical man who has had much to do with assistants will bear me out in what I say, that they possess an average of practical skill which would put to shame the majority of recently qualified men.

I am, Sir, yours, &c.,

Oct. 3rd, 1881. A. C. D.

To the Editor of THE LANCET.

SIR,—Undoubtedly the principal cause of the great difficulty which is experienced by young and well qualified gentlemen of obtaining even moderately remunerative employment, as your correspondent intimates, is that there are so many unqualified assistants who are willing to accept smaller salaries. There are, as your correspondent asserts, hundreds of young, though qualified gentlemen, who would be quite willing to act as assistants if only fair terms were offered and they were treated as gentlemen. It is positively disgusting the way some medical practitioners treat young men who reply to their advertisements—in fact, in many cases they are looked upon more like domestic servants seeking employment than members of a noble profession, and as equal to themselves in point of qualification, although perhaps inferior in practical experience. A man replies to an advertisement, stating his experience, qualifications, height, weight, &c. He gets a reply from the advertiser, telling him that, from the tone of his letter, he (the advertiser) thinks he will suit him, also asking what salary he would expect, and requesting that his carte-de-visite be enclosed. The man again replies, furnishing all particulars. He then receives at the end of a week or perhaps longer a letter thanking him for sending the carte, which he returns, and informing him that he thinks he has secured the services of a gentleman who will suit him, the reason in many cases simply being that he has engaged another man at £5 a year less than his correspondent asked.

I think, Sir, in all cases where a practitioner requires the services of an assistant he should, when writing to the applicant, state the salary he is prepared to give, and not leave it to the party applying for the engagement to say what remuneration he expects, and if he do not entertain the application the principal should intimate the fact as early as practicable to the applicant, and not keep the latter an indefinite time without an answer, or perhaps without a reply at all.

If these little matters were looked to, and qualified assistants seeking situations were to be more uniform as to the amount of salary they would agree for, fixing a standard and not going below it, much would be done to better the employer and the class of assistant.

I am, Sir, yours respectfully,

Oct. 4th, 1881. A CONSTANT READER OF "THE LANCET."

HERBAL DECOCTIONS.

To the Editor of THE LANCET.

SIR,—Your kindness in placing before your readers the undermentioned question, and obtaining a reply, would supply a want felt by many of them, especially those in the country who use herbal and plant decoctions both as food and medicine, but are in want of knowledge how to preserve them for the season of the year when not found growing. Question: How may a decoction of herbs or plants be preserved so as to retain their natural qualities unimpaired, chemically and medicinally, for a length of time—say one year or more—without getting changed?

I am, Sir, yours, &c.,

Sept. 30th, 1881. IGNORAMUS.

Chirurgeon.—The office of Serjeant-Surgeon to the Sovereign was instituted in 1461, when William Hobbys was appointed with a salary of forty marks per annum.

Y. Z. will find an amusing account of the work of B. S. Albinus in Atkinson's Medical Bibliography.

A. J.—No Hunterian Oration will be delivered next year.

A Registered Medical Practitioner (in practice).—It is certainly not customary in London.

Sartorius had better apply to the Secretary of the College.

THE TREATMENT OF NERVOUS DISEASES.

To the Editor of THE LANCET.

SIR,—In Dr. George Vivian Poore's recent interesting "Bradshawe Lecture" a case of absolute loss of power of the left arm is related, and the treatment described is instructive, especially at the present time, when remedies are apparently often used in nervous diseases without any reference to the true nature of the parts involved.

Dr. Poore says that "in spite of a daily, methodical, and most efficient galvanisation of the muscles, and the administration of mercury, strychnine, iodides, and arsenic, there had not been, though a twelvemonth has elapsed since the attack, any tangible improvement in the power of the limb, which is still absolutely useless." Then he further on says, "It is needless to say that the diagnosis of motor cell (?) or nerve root (?) is of great importance for prognosis. The regeneration of a motor cell is inconceivable, while the power of regeneration of conducting fibres seems almost unlimited."

Now, with regard to electricity in the treatment of nervous disease, the late practical and accomplished physician, Dr. Neligan, more than thirty years ago used to say that it must be looked upon as a remediable agent applicable to local and not general paralysis. He had not seen any benefit from it where the cause of the disease could be traced to the brain or spinal cord, but he had seen it in these cases prove injurious by its effects in hurrying on the circulation.

More recently Dr. Russell Reynolds has said, "Electricity in its many forms has come again into fashion, and constant and faradaic currents, chain batteries, and magnetic belts are topics of common conversation in boudoirs and clubs, as well as in the consulting-rooms of physicians. The mischief that is being done by the abuse of such an agent is grave and manifold. Electricity has again and again been used when it could by no possibility have been productive of the slightest advantage, and when the production of such enforced action of muscle and nerve has but diminished the strength and exhausted both the energies and the endurance of those who had not one grain of either of these qualities to spare."

In deciding on the treatment of nervous diseases it is well to bear in mind the excellent advice of the late Dr. Neligan and the admonitory remarks of Dr. Russell Reynolds.

I am, Sir, your obedient servant,

GEORGE ALLAN HUTTON,
Surgeon-Major H.P. (late the Rifle Brigade).

Leamington, Sept. 27th, 1881.

Dr. John Evans.—Soak coarse calico bandages in the silicate of potash solution, roll them up, and apply them three layers thick to the limb well protected with cotton-wool. The splint is dry and hard in from twenty-four to seventy-two hours.

ERRATUM.—In the last number of THE LANCET, p. 580, first column, line 28 from the bottom, for "Mr. Lawrence Burt," read Mr. Lawrence Booth.

COMMUNICATIONS not noticed in our present number shall receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Evans, Dublin; Dr. Chapman, Hereford; Messrs. Pears, London; Dr. A. J. Bernays, London; Dr. Crossfield, Douglas, Isle of Man; Mr. Field, London; Mr. M. A. Adams, Maidstone; Dr. Douglas Powell, London; Mr. Goodsall, London; Dr. Tennent, Edinburgh; Mr. C. S. Grant, Gold Coast; Dr. Allchin, London; Mr. Harmar Smith, Ramsgate; Mr. Startin, London; Mr. Kingzett, London; Dr. Buzzard, London; Dr. Renshaw, Fernside; Mr. Walsh, Worcester; Mr. Nicholl, Belfast; Mr. Taylor, Wymondham; Mr. Armstrong, Newcastle; Mr. Wilson, St. Leonards; Mr. Buck, North Shields; Mr. P. Blakiston, Philadelphia; Mr. Wylie, Belfast; Mr. Pike, Loughborough; Miss Yates; Dr. Emanuel Frank, Vienna; Mr. Reeves, London; Mr. Whitehead, Manchester; Mr. Webb, Coleshill; Dr. Cameron; Mr. Reginald Harrison; Dr. Murphy, Sunderland; Mr. Collier, Enfield; Mr. S. Boyd, London; Dr. Kitchener, Bath; Mr. S. O. Bishop, Upper Assam; Mr. J. P. Cæsar, London; Mr. S. R. Lovell, London; Dr. Prentiss, Washington; Mr. R. C. Lucas, London; Dr. Davidson, Goulburn, New South Wales; Mr. Cook, Richmond; Mr. Kelly, London; Dr. Will, Aberdeen; Miss Hopley, London; Dr. Stocker; Dr. Ward Cousins, Southsea; Mr. Lyons, London; Dr. Norman Kerr, London; Dr. Neale, Hampstead; Mr. Blomfield, Exeter; Messrs. Kerr and Co.; Mr. Atkins, Inverness; Mr. Wheeler, Manchester; Mr. Davies, Bath; Mr. Lamb, Albrighton; Mr. Elliott, Carlisle; Mr. Mansell, London; Dr. Prior, St. Albans; Medicus; Civis Medicus; M.D.; A. H. B.; Ignoramus; Fama Superstes; Beta; The Chairman of the Native Guano Company; M.D., Allopath; P.; A. B.; Justitia; F. N. C.; An Old Subscriber; Tortoise; Physician; A. C. D.; A Constant Reader of THE LANCET; M.D., Manchester; Indicus; A Registered Medical Practitioner; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Clark, Folkestone; Mr. Benecsam, King William's-town; Dr. Fleury, London; Dr. Barron, Latham; Mrs. Bidwell, Buxton; Mr. Ling, Saxmundham; Mr. Hardwicke, Tunbridge; Mr. Spanton, Hanley; Dr. Bower, Bedford; Dr. Maxwell, Woolwich; Dr. Pew, Brighouse; Dr. Ogilvie, Keppin; Mr. Murdoch, London; Mr. Wilson; Mr. Scott, Dumfries; Mr. Webb, Marden; Dr. Charteris, Hipperholme; Mr. De Renzy, Stourbridge; Mr. Willy, Birmingham; Mr. Wheeler, Bayswater; Mr. Richmond, Chester; Mr. Clark, Horncastle; Messrs. Hamilton and Co., Calcutta; Mr. Bullin, Bampton; Messrs. Beal and Co., Brighton; Mr. Burgess; Dr. Marsden; Mr. Roland, Sandbach; Mr. Hay; Mr. Lewis, Llangranog; Mr. Dobb, Newton-le-Willows; Messrs. Griffin; Lucknow; Jacobus; A. B. C., Newton Abbott; A. B., Botesdale; Medicus, Bradford; Medicus, Newport; Medicus, Bradford-on-Avon; M.A.; K 54; Mars; X. Y. Z.; H. C., Mile-end; M. L.; A. B., Clapham; R. E. D., Birmingham; Catholic; Medicus, Worthing; M.D., Bolton; W. F., Manchester; Alpha, Leytonstone; M.; Ibex, Rochdale; Registrar, Bath; Omega; Æsculapius; Tobey; Oxon, Paris; M., Euston-road; Paratus, Stafford; &c., &c.

Church of England Pulpit, North Wales Guardian, Sunderland Daily Echo, Somerset County Herald, Estates Roll, Oswestry Advertiser, Analyst, Il Morgagni Giornale, Sheffield Independent, The Animal World &c., have been received.

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